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Hearing Date: September, 9, 2020

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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :
Approval of Its Default Service Plan for the Period : P-2020-3019522
From June 1, 2021 through May 31, 2025 :

**REBUTTAL TESTIMONY OF BECKY MEROLA ON BEHALF
OF CALPINE RETAIL HOLDINGS, LLC**

TOPICS:

General Observations About Competitive Retail Market
Recovery of Network Integration Transmission Costs

AUGUST 14, 2020



1 **REBUTTAL TESTIMONY OF BECKY MEROLA**

2 **INTRODUCTION AND PURPOSE OF TESTIMONY**

3 **Q. Please state your name and business address.**

4 A. My name is Becky Merola. My business address is 5435 Mercier Street. Lewis Center,
5 Ohio 43035.

6 **Q. By whom and in what capacity are you employed?**

7 A. I am employed by Calpine Energy Solutions, LLC (“Calpine Solutions”). My title is
8 Director, Government and Regulatory Affairs.

9 **Q. How long have you held this position?**

10 A. Including my time at a predecessor company, I have held this position for approximately
11 12 years.

12 **Q. Please summarize your relevant experience.**

13 A. I have worked in the energy field for more than 33 years. Since 1994 I have actively
14 participated in, collaborated, testified, and worked on market restructuring proceedings and
15 legislation, as well as negotiated settlements, relating to unbundling natural gas and/or electricity
16 in 20 states including Pennsylvania. I have represented and participated in regional transmission
17 organization (“RTO”) stakeholder proceedings on behalf of load-serving entity members of the
18 ISO New England, PJM and the New York ISO.

19 **Q. What are your current duties as Director of Government and Regulatory Affairs?**

20 A. I represent and advocate the regulatory and government affairs policy positions of
21 Calpine Solutions and its parent Calpine Retail Holdings LLC (“Calpine Retail”). My territory
22 includes not only Pennsylvania but also Ohio, Virginia, Maryland, New Jersey, New York,

1 Connecticut and the District of Columbia. I am responsible for providing this testimony on
2 behalf of Calpine Retail and its retail subsidiaries, including Calpine Solutions.

3 **Q. Please describe Calpine Retail.**

4 A. Calpine Retail is an independent, national provider of retail electric service across 20
5 states. Through its subsidiaries it operates as a licensed Electric Generation Supplier (EGS) in
6 Pennsylvania. Calpine Retail is also a Load Serving Entity (LSE) and member of PJM
7 Interconnection LLC. Calpine Retail is actively serving and soliciting customers throughout
8 Pennsylvania, including in the territory served by Duquesne Light Company (“Duquesne”).
9 Calpine Retail currently offers a wide variety of demand-related and energy-related products and
10 services beyond simple energy procurement, including load and risk management as well as
11 renewable energy and sustainability solutions. Our products and services are designed to meet
12 the individualized needs and demands of Calpine Retail’s customers and capture the benefits of
13 the competitive wholesale energy environment and bring those benefits forward into to
14 Pennsylvania’s competitive retail electric market.

15 **Q. Have you ever provided testimony before the Pennsylvania Public Utility
16 Commission (“PUC” or “Commission”)?**

17 A. Yes. I testified in a similar docket regarding the First Energy companies’ default service
18 plans in 2018, in Docket P-2017-2637855 *et al.* I have also recently submitted testimony for the
19 PECO DSP V proceeding in Docket No. P-2020-3019290 and the PPL DSP V proceeding in
20 Docket No. P-2020-3019356.

21 **Q. Which Direct Testimony in this proceeding are you addressing?**

22 A. I have reviewed and am addressing here the Direct Testimony of Christopher Kallaher on
23 behalf of the so-called EGS Parties.

1 **Q. What is the purpose of your Rebuttal Testimony?**

2 A. My rebuttal testimony opposes the recommendation of Mr. Kallaher in part VIII of his
3 testimony, beginning on page 26, to shift the Network Integration Transmission Services, or
4 “NITS,” costs incurred by competitive retail electric EGSs, into a non-bypassable charge to be
5 levied by Duquesne on all customers of Duquesne, both DSP customers and the customers of
6 EGSs.

7 **Q. Why do you object to Mr. Kallaher’s proposal?**

8 A. Mr. Kallaher is looking to shed retail business risk and move it from the competitive
9 retail market to all customers of the utility, regardless of existing market, contracts and products
10 and services. When it comes to servicing customers who do not take default service, but who
11 instead rely on Electric Generation Suppliers (EGS) such as Calpine Retail, such cost shifting
12 would simultaneously limit existing and potential customers’ product and service choices. Not
13 only would this harm the competitive retail market, it would remove any incentive and
14 opportunity to create customized products and services that are, or potentially might be,
15 formulated to assist EGS customers in addressing these costs.

16 **Q. How does the current system for allocating NITS costs affect competition?**

17 A. An important factor overlooked by Mr. Kallaher is that NITS charges are demand based.
18 This creates an opportunity for LSEs such as Calpine Retail and the companies represented by
19 Mr. Kallaher to manage these costs. Not every customer has the same load profile, nor does
20 every LSE. NITS are manageable and provide the opportunity to offer products and services in
21 the retail market space. As structured by PJM, LSEs individually have the ability to proactively
22 understand their customers’ needs and work with their customers to manage their loads. LSEs in
23 the competitive market (unlike a utility that offer a simplified one size fits all as the default

1 supplier) can work with customers to adjust their usage to more efficiently only use the amount
2 of transmission to meet the individual needs of the customer.

3 **Q. How would adopting Mr. Kallaher's proposal affect competition?**

4 A. Interestingly, Mr. Kallaher acknowledges (at page 32, lines 8-11) that the robust
5 competition among EGSs which exists in Duquesne service territory undoubtedly puts
6 downward pressure on the risk premium associated with NITS. That is correct and that is one of
7 the benefits of moving to a retail competitive market. That risk is shifted away from the
8 ratepayer/customer onto the market and the price is reflective of the competitive efficiencies and
9 discipline of the market. The Pennsylvania customer is benefitting. But under Mr. Kallaher's
10 proposal, neither the LSEs nor their customers would have any incentive to manage their load,
11 because their obligation to pay for NITS would be based on the average demand seen by
12 Duquesne.

13 **Q. Do you agree with Mr. Kallaher's assertion at page 4, lines 12-13, and page 9, lines
14 22-23, of his testimony that his proposal for changing the way NITS costs are recovered
15 would be competitively neutral?**

16 A. No. A policy change is not competitively neutral if it removes products and services
17 from the competitive market and harms existing market participants. The small subset of EGSs
18 represented by Mr. Kallaher are simply looking for favoritism in support of their own business
19 plans.

20 **Q. Has Mr. Kallaher's proposal been considered in other proceedings?**

21 A. Yes, although you would not know it from Mr. Kallaher's testimony. Duquesne's
22 inclusion of NITS costs for DSP customers only and not for customers of retail EGSs has been

1 consistent for approximately 20 years. It is also consistent with PECO's, First Energy's and
2 PPL's approach to NITS.

3 **Q. Is there any reason to deviate from this substantial precedent?**

4 A. No. It is true that transmission rates now change annually using a formula that is subject
5 to FERC approval, but there is a regulatory process in place at FERC for determining those rates
6 as well as the ability to challenge those rates. This process at FERC does not negate the ability
7 of EGS companies to manage their loads and manage their NITS costs.

8 **Q. Please summarize your position.**

9 A. The members of the EGS Parties, which represent a subset of the marketplace, are
10 looking for ways to not take responsibility for their own business decisions, level of risk
11 management expertise and associated management decisions, valuation of risk, and products
12 they choose to offer. In brief, they are trying to shed and shift market risk associated with their
13 own demand-driven costs. Rather than using expertise to manage these costs and associated
14 risks, they are asking for Duquesne's DSP customers to bail them out. As a result, one of the
15 principal benefits of moving to retail competition would be eliminated by removing products and
16 services and any competitive discipline for a specific LSE demand based cost in the marketplace.

17 Furthermore comparing retail electric market products and services to a fully regulated
18 default service is an apples to oranges comparison. The default service is based on a uniform
19 master supply agreement with no individually negotiated terms of service. It is essentially one
20 size fits all. In contrast, Pennsylvania has afforded its competitive Electric Generation Suppliers
21 a market that has worked in the past and is working today. EGSs have the freedom to choose the
22 products and services they offer into the marketplace. Each EGS has the freedom to build,
23 establish and promote innovative products and services to meet its individual customers' needs,

1 as well as the structure and timing of those services based on the EGS's own business and
2 management decisions.

3 **CONCLUSION**

4 **Q. Does this conclude your Rebuttal Testimony?**

5 A. Yes. I would, however, specifically reserve the right to offer additional testimony or
6 supplement my testimony to address other matters or proposals which might arise.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of a Default Service Program for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

DIRECT TESTIMONY OF HARRY GELLER

ON BEHALF OF

THE COALITION FOR AFFORDABLE UTILITY SERVICES AND
ENERGY EFFICIENCY IN PENNSYLVANIA (“CAUSE-PA”)

July 17, 2020

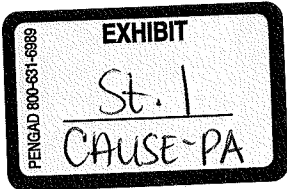


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1 **PREPARED DIRECT TESTIMONY OF HARRY GELLER**

2 **Q. Please state your name, occupation, and business address.**

3 A. Harry Geller. I am an attorney. Though I am currently retired, I have maintained an office
4 at the Pennsylvania Utility Law Project (PULP), 118 Locust St., Harrisburg, PA 17101 and serve
5 as a consultant to organizations representing the low income and their clients. Since the Governor's
6 Emergency Order regarding the Covid-19 pandemic, I have been working from 4213 Orchard Hill
7 Rd, Harrisburg, PA, 17110.

8 **Q. Briefly outline your education and professional background.**

9 A. I received my B.A. Degree from Harpur College, State University of New York at
10 Binghamton in 1966, and a J.D. degree from Washington College of Law, American University in
11 1969. Upon graduation from law school, I entered the Volunteers in Service to America (VISTA)
12 program, where I was assigned to the New York University Law School. I took courses in the Law
13 School's Urban Affairs and Poverty Law program and worked with the Community In Action
14 Program on the West Side of Manhattan in New York City from 1969-1971. In 1971, I started as
15 a Staff Attorney for the New York City Legal Aid Society, Criminal Court and Supreme Court
16 Branches in New York County. In 1974, I moved to Pennsylvania and began working for Legal
17 Services, Incorporated (LSI). LSI was a civil legal aid program serving Adams, Cumberland,
18 Franklin and Fulton Counties. I worked at LSI from 1974-1987 first as a Staff Attorney, then as
19 Managing Attorney, and ultimately became Executive Director. Through a restructuring with other
20 legal services programs, LSI became part of what is now known as MidPenn Legal Services and
21 Franklin County Legal Services.

22 In 1988, I was hired to be the Executive Director of PULP, a statewide legal services
23 program dedicated to the rights of low-income utility customers. At PULP, I represented low-

1 income individuals with utility and energy concerns, and supported organizations advocating for
2 low income households in utility and energy matters. As the Executive Director of PULP, I
3 consulted and co-counseled on a wide variety of individual utility consumer cases, and I
4 participated in task forces, work groups and advisory panels. For many years, I served as Chairman
5 of the LIHEAP Advisory Council to the Department of Human Services and the Consumer
6 Advisory Council to the Public Utility Commission. Throughout my career, I regularly trained
7 community organizations, legal aid staff, and advocacy groups across Pennsylvania about the
8 various utility and energy matters affecting Pennsylvania's low-income population. I retired from
9 PULP on June 30, 2015. Although no longer employed by PULP, I now serve as a consultant to
10 PULP and its clients. In sum, I have over 50 years' experience working with and providing
11 services to households in poverty, including the past 32 years focusing specifically on utility and
12 energy issues affecting low-income consumers. My resume is attached as Appendix A.

13 **Q. Please describe the focus of your work, including relevant work experience on issues**
14 **of low-income families' ability to afford essential goods and services such as utilities?**

15 A: I have represented low-income individuals and organizations serving low income
16 populations in a wide variety of legal matters, including family law, public benefits,
17 unemployment compensation, utility shut-offs, debtor/creditor, bankruptcy, and housing related
18 disputes. Over the past 32 years, my focus has been ensuring that low-income households can
19 connect to, afford, and maintain utility and energy services.

20 In all of these legal matters, I worked almost exclusively on behalf of individuals and
21 households that subsist on income that is at or below 150% of the Federal Poverty Level (FPL).
22 Through this work, I have become intimately familiar with the daily lives of countless of our
23 poorest citizens. I have spent thousands of hours assisting clients to comb through their budgets

1 to attempt to assist them to make ends meet. Over the years, I have consistently been surprised by
2 the almost complete inability of low-income families to pay the most basic monthly necessities on
3 the incomes they have. Each and every month, my clients faced the stark choice of choosing
4 which bills they could forgo with the least drastic consequences. That struggle is even more
5 profound today than when I retired several years ago, as low income communities face
6 unprecedented economic disparities as a result of the pandemic response.

7 In addition to my deep understanding of the daily monetary struggles facing poor families,
8 I have an extensive knowledge of the array of programs designed to allow low-income individuals
9 to afford electric service and other essential utility services.

10 While at PULP, I was involved in countless proceedings evaluating the effectiveness of
11 required Universal Service Programs to assist low-income families. I have spent thousands of
12 hours identifying program issues in Universal Services and making recommendations for changes
13 to Universal Service programming to better serve low-income consumers. Ultimately, this
14 advocacy led to the recognition that integrated programs for low income consumers were
15 necessary. As the Executive Director of PULP, I played an instrumental role in the development,
16 oversight, and monitoring of the initial pilot programs that have since evolved into the current
17 statutorily required low-income Universal Service Programs. Each of these programs is structured
18 to provide a different and complementary form of assistance to low-income customers, such that
19 those customers have the ability to afford and maintain basic utility service.

20 For example, the Customer Assistance Program (CAP) provides alternatives to traditional
21 collection methods for low income, payment troubled utility customers. The Low Income Usage
22 Reduction Program ("LIURP") is a targeted weatherization and energy efficiency program
23 designed to assist low-income households with the highest energy consumption, payment

1 problems, and arrearages. These programs work in tandem and are designed to assist low-income
2 households in maintaining affordable utility services and safe living environments while reducing
3 utility collection, thereby benefitting other ratepayers.

4 **Q. For whom are you testifying in this proceeding?**

5 A. I am testifying on behalf of the Coalition for Affordable Utility Services and Energy
6 Efficiency in Pennsylvania (“CAUSE-PA”).

7 **Q. Please state the purpose of your Direct Testimony.**

8 A. The purpose of my testimony is to address issues presented by the Petition of Duquesne
9 Light Company (“Duquesne” or “the Company”) for Approval of its Default Service Programs for
10 the Period of June 1, 2021 through May 31, 2025, including issues related to Duquesne’s role in
11 ensuring vulnerable consumers have access to affordable rates. I will also briefly address a
12 regulatory billing issue that must be rectified to ensure that residential consumers are not
13 unlawfully terminated for nonpayment of non-basic service charges.

14 Specifically, in section I, I will first provide an overview of Duquesne’s filing, and the
15 recommendations I make throughout my testimony. In section II, I will provide a data-driven
16 assessment of residential shopping as a whole, and more specifically, the impact of residential
17 shopping on confirmed low income customers and other vulnerable customer groups. In sections
18 III-V, I will separately address Duquesne’s Electric Vehicle Time of Use (EV-TOU) rate proposal,
19 Standard Offer Program (SOP) proposal, and Customer Assistance Program (CAP) Shopping
20 proposal. In section VI, I will discuss the need for Duquesne to improve its residential customer
21 bills to allow consumers to easily compare the price they pay to the applicable default service price
22 to compare. In section VII, I will address Duquesne’s current policy regarding bill ready billing,
23 which appears to inappropriately permit suppliers to include non-basic service charges in the

1 generation charges placed on a shopping customers' bill. Finally, in section VIII, I will provide a
2 comprehensive summary of my findings and recommendations.

3 **I. SUMMARY OF DUQUESNE'S DEFAULT SERVICE PROPOSALS**

4 **Q: Please summarize Duquesne's DSP V proposal.**

5 A: Duquesne filed the docketed DSP proceeding in accordance with its responsibilities as a
6 Default Service Provider pursuant to Pennsylvania's Electricity Generation Customer Choice and
7 Competition Act, 66 Pa. C.S. § 2891 *et seq.* (the "Competition Act"), as amended by Act 129 of
8 2008 ("Act 129"); the Commission's default service regulations found at 52 Pa. Code §§ 54.181-
9 54.189; and the Commission's Policy Statement on Default Service at 52 Pa Code §§ 69.1801-
10 1817. Specifically, Duquesne is obligated to provide electric generation service to all customers
11 within its service territory who do not select a retail electric generation supplier ("EGS") or who
12 chose to return to default service at the conclusion of a contract for generation service, or when
13 the EGS providing electric generation is unable or unwilling to continue to serve the customer.
14 Through its Petition, Duquesne seeks to establish the terms and conditions under which it will
15 procure default service supply, provide default service to non-shopping customers, and satisfy the
16 requirements of the Alternative Energy Portfolio Standards Act. For its residential default service
17 customer class, Duquesne proposes to procure default service supply "through overlapping twelve-
18 month and twenty-four month full requirements contracts."¹

¹ Duquesne Petition at 13, para. 40.

1 **Q: Is Duquesne proposing any alternative default service rate structures for residential**
2 **consumers?**

3 A: Yes, Duquesne is proposing an optional Electric Vehicle Time of Use (EV-TOU) rate for
4 residential default service customers with an electric vehicle.

5 **Q: Does Duquesne propose any additional programs related to the provision of default**
6 **service or residential customer shopping?**

7 A: Yes. Duquesne proposes to continue its current Standard Offer Program (SOP), with
8 modifications, and to implement a new Customer Assistance Program (CAP) Shopping Plan.

9 **Q: Do you have concerns about Duquesne's DSP V proposals?**

10 A: Yes. I am concerned that Duquesne's DSP EV-TOU, SOP, and CAP Shopping Plan
11 proposals do not provide an adequate level of consumer protection, and will expose Duquesne's
12 residential consumers – especially those with limited economic means – to financial and other
13 hardships.

14 As I will explain in detail below, data revealed through discovery in this proceeding shows
15 a disturbing and prolonged pattern in the competitive market: *Residential shopping customers in*
16 *Duquesne's service territory were charged tens of millions of dollars more for electricity each and*
17 *every month since January 2017...to the extent of nearly \$102.9 million dollars in net charges in*
18 *excess of the default service price.* In this same timeframe, confirmed low income shopping
19 customers who were not enrolled in CAP - a subset of Duquesne's most vulnerable customers
20 whom Duquesne was able to track - were charged nearly \$900,000 more for competitive electric
21 supply than they would have paid if they remained with default service. Duquesne's DSP program
22 proposals are inadequate to protect consumers from this well documented and persistent harm, and

1 must be amended or otherwise eliminated from the Plan to address and respond to these troubling
2 trends.

3 **Q: Are there other issues you identified with Duquesne's DSP that you intend to address?**

4 A: Yes. I will briefly address issues identified with Duquesne's residential customer bill,
5 which may be contributing to some of the excessive prices that residential shopping customers are
6 paying for competitive market service, and will offer recommendations to ensure that consumers
7 can more easily identify the price they are paying for electric supply.

8 I will also address Duquesne's current bill ready billing policy, which allows suppliers to
9 include non-basic service charges in the rates charged for electric supply.² Based on the
10 information identified in discovery as of the date my testimony was filed, it appears as though
11 Duquesne's policy could result in termination of residential customers for nonpayment of non-
12 basic service charges in violation of the Commission regulations and DHS LIHEAP vendor
13 standards.

14 **II. RESIDENTIAL CUSTOMER SHOPPING DATA**

15 **Q: You note above that residential shopping customers have been charged millions of**
16 **dollars more than the default service price over the last three years. Please explain.**

17 A: Overall, on a net and average basis over the last three years and five months (since January
18 2017), Duquesne's residential shopping consumers were charged nearly \$102.9 million more than
19 they would have paid if they did not shop.³

20 As further extrapolated in CAUSE-PA Exhibit 1, the lowest monthly average price that
21 residential shopping customers paid for electricity since January 2017 was \$0.0914/kWh in

² CAUSE-PA to Duquesne I-14 & I-15.

³ CAUSE-PA Exhibit 1. Note that five years of data was originally requested; however, as a result of Duquesne's system constraints, they were only able to produce comparable data for the last three years.

1 January 2017.⁴ In the first five months of 2020 alone, and straight through the pandemic,
2 Duquesne's residential shopping customers overpaid for electricity by nearly \$14.5 million.⁵

3 **TABLE 1: Residential Shopping – Total Estimated Charges Over PTC⁶**

2017	\$21,332,822.53
2018	\$29,600,035.18
2019	\$37,437,453.82
2020 (Jan-May)	\$14,498,972.43
Total	\$102,869,316.96

4

5 In short, these figures demonstrate that residential shopping customers have consistently
6 paid much more than the default service price, and that this price differential has substantially
7 increased each year for the last three years for which we have full annual data. This signifies to
8 me that the problem is getting worse – notwithstanding substantial and costly efforts of Duquesne
9 and the Commission to educate residential customers about how to effectively shop for competitive
10 electric supply.

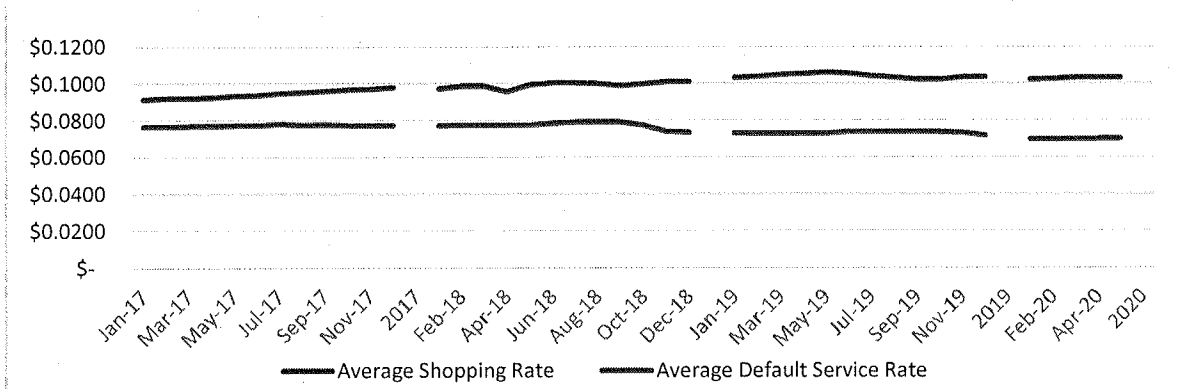
11 Chart 1 shows that average residential shopping has grown increasingly divergent from
12 patterns in the default service price over the last three years. While default service prices have
13 generally remained flat or trended down since 2017, the average retail residential shopping rates
14 have steadily increased.

⁴ CAUSE-PA Exhibit 1.

⁵ CAUSE-PA Exhibit 1.

⁶ CAUSE-PA Exhibit 1.

1 **CHART 1: Avg. Residential Shopping Rates vs. Avg. Residential Default Service Rates**



2

3 **Q: Were you able to also estimate the average price that each residential shopping**
 4 **customer paid in excess of the default service price?**

5 **A:** Yes. On a monthly basis, residential shopping customers paid, on average, between \$7 and
 6 \$27 *each month* over the applicable default service price.⁷ Annually, the charges in excess of the
 7 default service price ranged between \$131.86 in 2017 to \$238.55 in 2019. Thus far in 2020,
 8 between January and May, residential shopping customers have paid an average of \$95.87 more
 9 than they would have paid for default service. As Table 2 and Chart 2 reflect, the amount
 10 residential consumers are paying for competitive supply in excess of the default service price is
 11 trending upward year over year.

12 **TABLE 2: Residential Shopping - Average Per Customer Over Default Service Charges⁸**

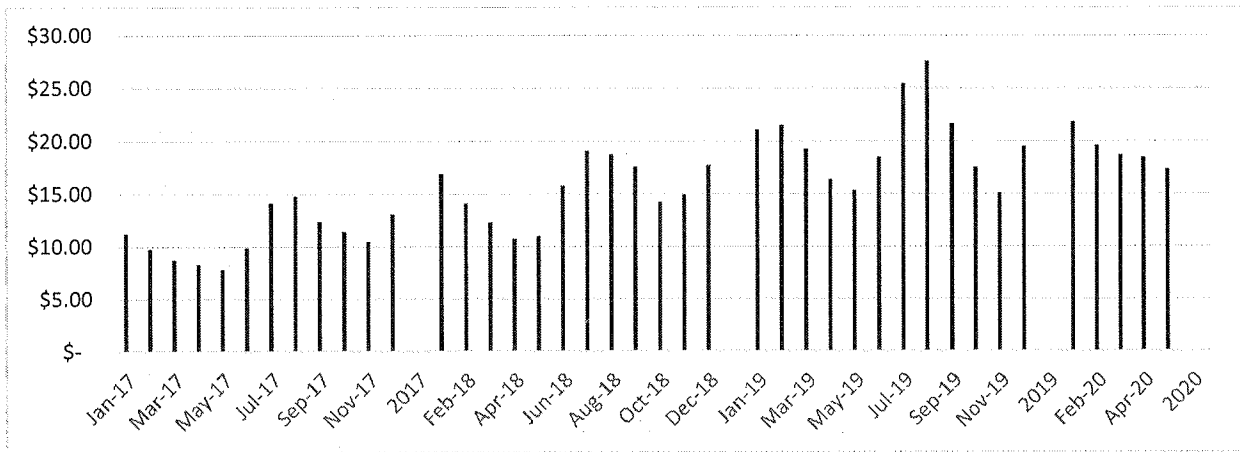
2017	\$131.86
2018	\$182.83
2019	\$238.55
2020 (Jan.-May)	\$95.87

13

⁷ CAUSE-PA Exhibit 1.

⁸ CAUSE-PA Exhibit 1.

1 **CHART 2: Avg. Monthly Charges in Excess of Default Per Residential Shopping Customer**



2

3 **Q: Please explain how you reached the conclusion that Duquesne’s residential shopping**
4 **customers have consistently paid more than the default service price since 2017?**

5 A: In response to discovery, Duquesne provided information about the overall charges billed
6 to residential consumers for generation supply service and the total kWh used by residential
7 consumers, broken down by shopping and default service customers. With simple division,
8 subtraction, and multiplication, I was able to approximate the average per kWh rate paid on a
9 monthly basis by both residential shopping and non-shopping customers. I excluded CAP
10 customers from this analysis, as CAP customers are not currently permitted to shop for competitive
11 supply.

12 Once I arrived at the average kWh price paid by residential shopping and non-shopping
13 customers, I was able to determine the difference between the average price paid by non-shopping
14 customers from the average price paid by shopping customers to arrive at the monthly difference
15 in average rates. This is the amount per kWh that residential shopping customers paid in excess
16 of the price that non-shopping residential customers paid in any given month. From there, I
17 multiplied that excess price per kWh by the kWh consumed by those customers in a given month

1 to arrive at the total monthly dollar amount charged to residential shopping customers in excess of
2 the default service price.

3 Finally, to arrive at the average cost that an individual residential shopping customer paid
4 in excess of the default service price, I divided the total charges in excess of the default service
5 price by the total number of residential shopping customers in each month.

6 **Q: Exhibit 1 appears to have very minor variations between the average \$/kWh for non-**
7 **shopping customers and the applicable price to compare for that month. What accounts for**
8 **these variations?**

9 A: These slight variations are likely due to rounding.

10 **Q: Do these variations have a significant impact on your analysis?**

11 A: No. At most, the variations in any given month varied by a few thousandths of a cent –
12 and occurred on both sides. Rounding on both sides to a thousandth of a cent (up and down) would
13 not measurably impact this analysis.

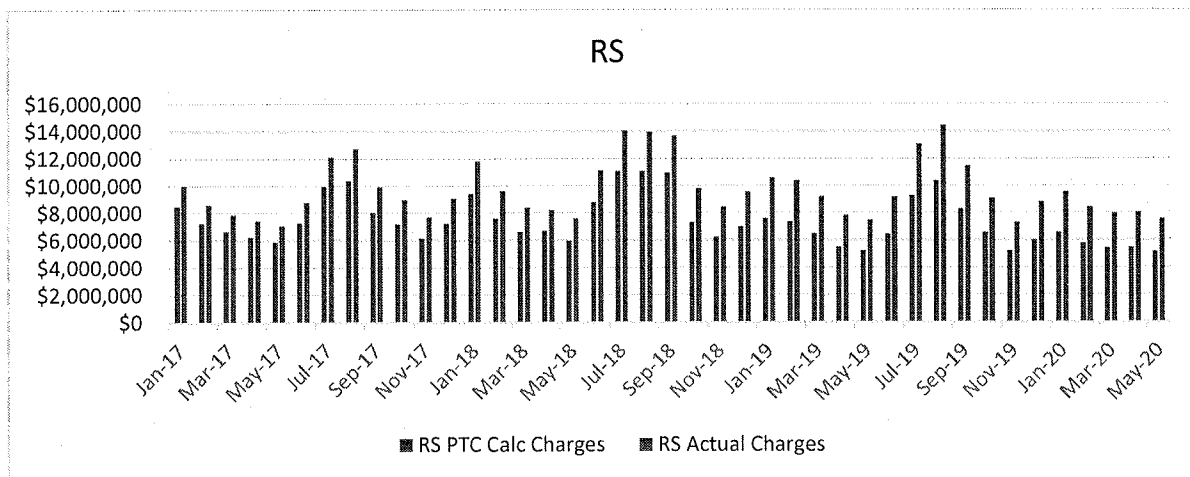
14 **Q: Is there any additional data to support your conclusion that residential shopping**
15 **customers have consistently paid more than the default service price over the last three years**
16 **and five months?**

17 A: Yes. In response to discovery, Duquesne provided a similar comparison, and calculated
18 what shopping customers would have paid for default service in each month over the last three
19 years.⁹ Duquesne's data comparison reveals the same patterns of overpayment in the residential
20 market as the analysis I provided above. Consistently, in each and every month since at least
21 January 2017, Duquesne's residential electric (RS), electric heat (RH), and electric heat pump

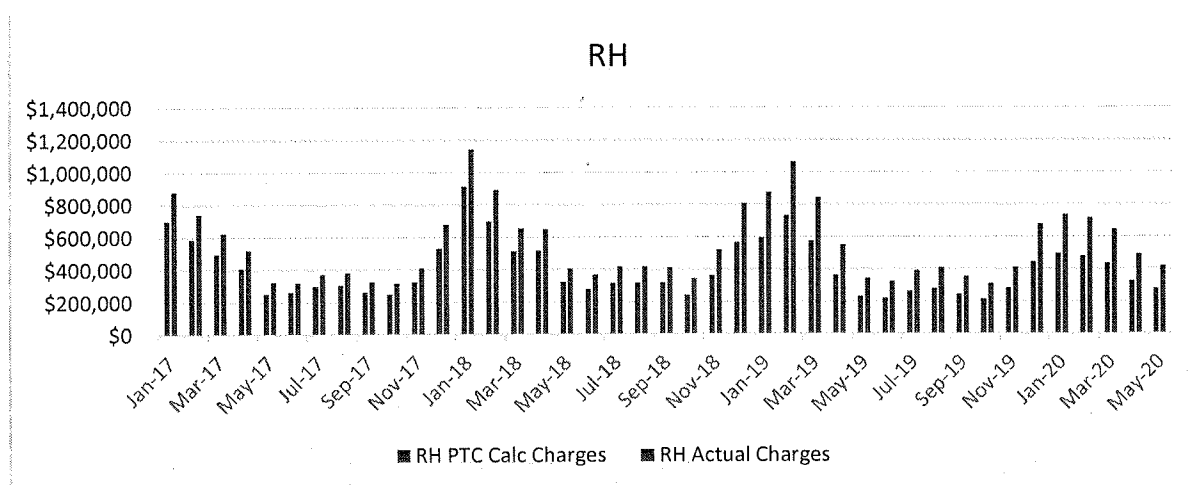
⁹ CAUSE-PA to Duquesne I-7-Revised. Note: cited discovery responses are appended hereto in Appendix B.

1 (RA) customers paid substantially more than they would have paid if they remained on default
2 service.¹⁰ This differential has only increased over time.

3 **CHART 3: Residential Shopping Actual vs. Calculated PTC¹¹**



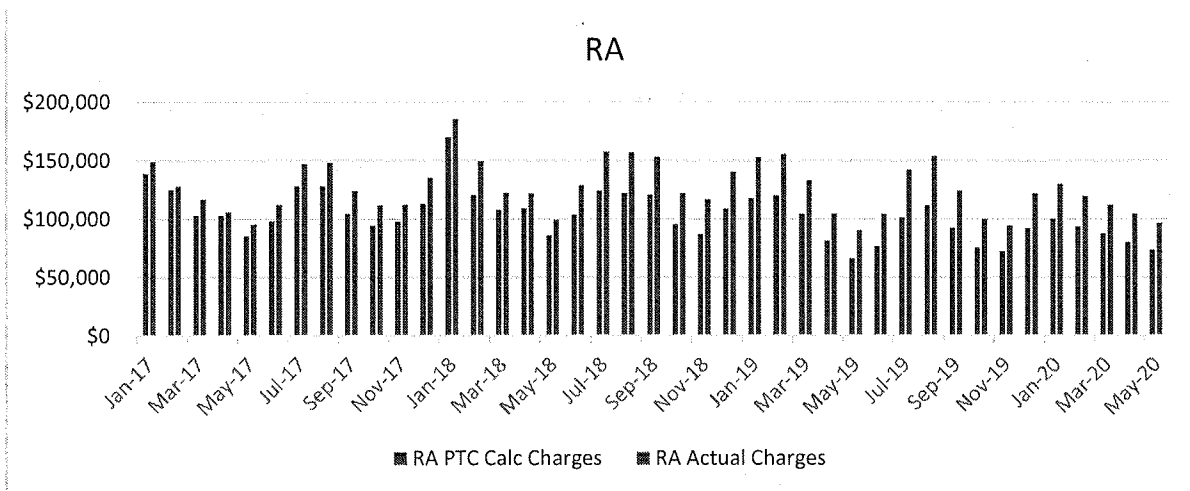
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¹⁰ Id.

¹¹ Id.



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In the face of data like this, it is undeniable that the cost savings anticipated by the Competition Act are not being achieved and that residential customers, as a class, have not fared well in the competitive market over time. Fortunately to date, as a result of Duquesne’s current prudent policy of excluding CAP customers from entering the shopping arena, these negative outcomes have not been exacerbated by the additional financial burden inherent in CAP customer shopping for both CAP customers and other residential ratepayers. However, as I will explain in detail in section V of my testimony, Duquesne’s CAP shopping proposal put forward in its Default Service Plan for June 1, 2021 through May 31, 2025 would, if approved, expose both CAP customers and other ratepayers to increased rates and program costs.

Q: You noted at the outset of your testimony that low income customers are also impacted by the financial harm associated with high supplier pricing. Please explain.

A: It is important to first note that there are some data constraints that limit the full analysis of low income customer shopping. Namely, Duquesne is only able to report specific low income customer data for “confirmed low income customers,” which includes those who are actively enrolled in CAP, who were removed from CAP within the last two years, who received LIHEAP or Hardship Fund grants within the last two years, or who participated in the Low Income Usage

1 Reduction Program (LIURP) in the last two years (if their income was at or below 150% of the
2 federal poverty level (FPL)).¹² In contrast, Duquesne’s estimated low income customer count is
3 based on local census data, adjusted proportionally to the number of Duquesne’s residential
4 customers. This latter figure is more representative of the level of poverty in Duquesne’s service
5 territory.

6 **TABLE 3: Confirmed Low Income vs. Estimated Low Income Customers**¹³

Year	Confirmed Low Income	Estimated Low Income
2016	45,065	134,808
2017	48,500	134,808
2018	49,346	95,316

7

8 Moreover, because Duquesne does not currently allow CAP customers to shop, the
9 confirmed low income shopping data I examined excludes customers who were actively enrolled
10 in CAP – leaving a relatively small pool of confirmed low income non-CAP shopping customer
11 data to analyze (between 1,220 and 2,991).¹⁴ Due to these limitations, the low income shopping
12 data only represents a very small segment of the Duquesne’s total low income customer
13 population.

14 Despite these limitations, I nevertheless believe the confirmed low income non-CAP
15 customer group is likely representative of the broader low income customer group and provides a
16 helpful metric to assess the impact of various policy and program changes– even if it only
17 represents a segment of the overall low income population.

¹² CAUSE-PA to Duquesne I-3.

¹³ See Pa. PUC, BCS, 2018 Report on Universal Service Programs and Collections Performance, at 5, 7 (Dec. 2019), available at http://www.puc.state.pa.us/General/publications_reports/pdf/EDC_NGDC_UniServ_Rpt2014.pdf.

¹⁴ CAUSE-PA Exhibit 2.

1 **Since January 2017, confirmed low income customers in Duquesne’s service territory**
2 **(not including CAP customers) were charged a *net* total of \$881,988 more than they otherwise**
3 **would have been charged if they remained on default service.** Table 4, excerpted from data in
4 CAUSE-PA Exhibit 2, shows the annual average over-payment for confirmed low income
5 shopping customers not enrolled in CAP.

6 **TABLE 4: Confirmed Low Income (Non-CAP) Shopping – Total Charges Over Default¹⁵**

2017	(\$4,686)
2018	\$216,850
2019	\$498,717
2020 (Jan-May)	\$171,107
Total	\$1,241,803

7
8 In developing CAUSE-PA Exhibit 2, I used the same analysis that I used for determining the
9 amount of over-charges by all residential shopping customers (explained above).

10 On a per customer basis, confirmed low income (non-CAP) shopping customers saved a
11 modest annual average of \$8.76 in 2017 (at an average of \$0.73/month); however, this vulnerable
12 customer group was charged exponentially more for competitive electric supply year over year in
13 2018 and 2019 – and to date in 2020. Just in the first five months of 2020, confirmed low income
14 (non-CAP) shopping customers were charged an annual average of \$91.55 – or \$18.31/month –
15 more than the default service price for competitive electric supply.

¹⁵ CAUSE-PA Exhibit 2.

1 **TABLE 5: Confirmed Low Income Shopping – Avg. Per-Customer Charges Over Default¹⁶**

Year	Avg. Annual \$ Over Default – Confirmed Low Income
2017	(\$8.76)
2018	\$89.73
2019	\$201.21
2020 (Jan-May)	\$91.55

2 Notably, the average LIHEAP grant for electric customers as of December 26, 2019 was
3 \$278.00¹⁷ – or just \$76.79 more than the price that low income shopping customers were charged
4 in excess of the default service price in 2019. In other words, public funds intended to be devoted
5 exclusively to assist a low-income household supplement the cost of electricity was almost entirely
6 diverted to pay the for the cost of shopping. As a result, average low income shopping customers
7 would have devoted roughly 3/4 of their LIHEAP grant, not to their benefit, but instead to cover
8 the difference in price between default and shopping rates.

9 As I will explain more thoroughly below, in section V of my testimony, low income
10 households already struggle to make ends meet – often foregoing basic life necessities to afford
11 energy services to their home. An increase in basic utility costs, such as those faced by confirmed
12 low income shopping customers, exacerbates unaffordability, increases uncollectible expenses,
13 and results in significant impacts to the health and safety of low income consumers.

14 **Q: Did you examine whether there might be racial disparities in the competitive market?**

15 A: Yes, through more data is necessary to adequately complete my analysis of this issue. The
16 evidence I have reviewed thus far suggests there may be a correlation between shopping and

¹⁶ CAUSE-PA Exhibit 2.

¹⁷ See CAUSE-PA Appendix C, Pa. DHS, Energy Assistance Summary (EASUM), Statewide Cash Demographic Report (9/21/2019-12/26/2019).

1 termination rates in predominately low income communities and communities of color.¹⁸ More
2 data and analysis is necessary to conduct a complete review; however, this preliminary data –
3 coupled with information from other states and the data discussed above regarding excessive
4 pricing for residential shopping customers – indicates to me that there may be racial equity issues
5 in the competitive electric market that require additional attention.

6 **Q: What information are you referring to from other states?**

7 A: A number of states have initiated investigations into their local competitive markets and
8 found not only that residential customers pay more for third party service, but that low income and
9 minority communities are the hardest hit.¹⁹ These reports have led to the call for the prohibition of
10 third party residential supply contracts in some states and full scale overhaul of the market in
11 others.²⁰

12 In Massachusetts, the state Attorney General’s office initiated an investigation into the
13 competitive market after receiving numerous complaints about door-to-door and telemarketing
14 activities by competitive suppliers.²¹ The report found that residential customers of competitive
15 suppliers actually paid \$253 million more than they would have for default service over a three
16 year period.²² The state Attorney General’s report found the harm to low income households to be

¹⁸ CAUSE-PA to Duquesne I-8, I-9, I-10, I-11.

¹⁹ See 2018 MA AGO Report at 2, 39; see also La Risa Lynch, Alternative energy scams hit poor blacks and Latinos the hardest, complaints show, The Chicago Reporter, Nov. 16, 2018.

see also Laurel Peltier & Arjun Makhijani, Ph.D., Abell Foundation, Maryland’s Dysfunctional Residential Third-Party Energy Supply Market: An Assessment of Costs and Policies (Dec. 2018) (hereinafter “Abell Report”), available at: <https://www.abell.org/publications/marylands-dysfunctional-residential-third-party-energy-supply-market>.

²⁰ See 2018 MA AGO Report at 2, 39; see also Abell Report at 21-23.

²¹ 2018 MA AGO Report at 2, 39.

²² MA Attorney General, Are Consumers Benefiting from Competition? An Analysis of the Individual Residential Electric Supply Market in Massachusetts, August 2019 Update, at vii, 6 (hereinafter “MA 2019 Update”) available at: https://www.mass.gov/files/documents/2019/07/31/Massachusetts%202019%20Update_August%202019.pdf

1 “overwhelming” and “alarming,” with low income households participating at double the rate of
2 all other households while being charged higher rates.²³ The report stated:

3 *Specifically, a community’s percentage of minority households; African American*
4 *households; Hispanic households; households with limited English proficiency;*
5 *and low-income households correlates with higher rates of participation in the*
6 *individual residential market for electric supply.*²⁴

7 The report further noted: “Not only are participation rates significantly higher in communities with
8 five of the six demographic attributes...analyzed, but also the premiums that residents in these
9 communities pay as a result of choosing competitive suppliers is greater than in other areas of
10 Massachusetts.”²⁵ Based on the results of this investigation, the Attorney General has called for a
11 ban on suppliers contracting directly with residential customers and an end to the individual
12 residential electric supply market.²⁶

13 In Illinois, consumers in zip codes with a majority of Black residents made three times as
14 many competition related complaints to the Public Utility Commission than majority white zip
15 codes per household.²⁷ In these zip codes, nearly 90 percent of third party supplier customers
16 overpaid for electricity, adding up to more than \$138 million more from June 2017 through May

²³ 2018 MA AGO Report, at 38 (101,922 low income households paid \$23.6 million more than they would have paid for default service. “The average low-income household on competitive supply lost \$231 over the course of the year. Some households lost more than \$541”).

²⁴ 2018 MA AGO Report at 27 (emphasis added).

²⁵ 2018 MA AGO Report at 27.

²⁶ 2018 MA AGO Report at 40-42; see also MA HD 1204/SD 880 - An Act Relative to Protecting Residential Electric Customers.

²⁷ See La Risa Lynch, Alternative energy scams hit poor blacks and Latinos the hardest, complaints show, The Chicago Reporter, Nov. 16, 2018, (investigating consumer complaints before the Illinois Public Utility Commission, and finding: “Majority Black ZIP codes have twice as many complaints per household as Latino ZIP codes and three times the rate of white ZIP codes”).

1 2018.²⁸ These findings led to a new law providing increased consumer protections.²⁹ This
2 legislation specifically limits the enrollment of any consumer who has received assistance from
3 Low Income Home Energy Assistance Program (LIHEAP) or the state’s Percentage of Income
4 Payment Plan (Illinois’s Customer Assistance Program).³⁰

5 In New York, similar problems led the Public Services Commission (PSC) to ban the sale
6 of competitive energy products to New York’s Customer Assistance Plan participants.³¹ Continued
7 problems later led the PSC to order a comprehensive restructuring of the state’s competitive supply
8 market after finding that customers of competitive suppliers (referred to in New York as Energy
9 Service Companies – or ESCOs) paid \$1.2 billion more than they would have paid for default
10 service over a three year period.³² The PSC observed that, “[I]t appears that a material level of
11 misleading marketing practices continues to plague the retail access market,” and that customers
12 pay more for products with no added benefit.³³ The PSC took decisive steps to overhaul its
13 competitive market in an effort to bar suppliers from overcharging residential consumers and small
14 commercial entities, including strengthening supplier eligibility requirements, prohibiting ESCOs

²⁸ See Illinois OAG, Attorney General Madigan Secures \$2.65 Million in Refunds for Illinois Residents Defrauded by Sperian Energy, Oct. 15, 2018, available at http://www.illinoisattorneygeneral.gov/pressroom/2018_10/20181015.html; see also Annual Report to the General Assembly, the Governor, and the Illinois Commerce Commission, Submitted pursuant to Section 20-110 of the Illinois Public Utilities Act, Office of Retail Market Development, Illinois Commerce Commission, June 2018 (hereinafter “Illinois 2018 Annual Report”), available at: <https://www.icc.illinois.gov/reports/report.aspx?rt=22> .

²⁹ See Illinois Home Energy Affordability and Transparency (HEAT) Act, SB 651 of 2019.

³⁰ See Ill. HEAT Act Sec. 16-115E(a) (exceptions provided for community aggregation and guaranteed savings programs).

³¹ State of New York Public Service Commission, Order Adopting a Prohibition on Service to Low-Income Customers by Energy Service Companies, Case Nos. 98-M-1343, 06-M-0647, 98-M-0667, (Dec. 16, 2016) (hereinafter “NY Low Income Order”).

³² State of New York Public Service Commission, Order Adopting Changes to the Retail Access Energy Market and Establishing Further Process, Case Nos. 15-M-0127, 12-M-0476, 98-M-1343, at 8 (Dec. 12, 2019) (hereinafter “NY ESCO Order”).

³³ *Id.* at 88-89.

1 from marketing products and services that are unrelated to commodity service, and improving
2 customer access to transparent product information.³⁴

3 Similar concerns have arisen in other states. Over approximately three years in Maryland,
4 residential consumers paid \$255 million more to competitive energy suppliers than they otherwise
5 would have paid for default service and, again, low income households were impacted most
6 profoundly by the increased costs.³⁵ In Connecticut, residential customers of retail electric
7 suppliers overpaid by \$38.2 million from September 2017 through August 2018.³⁶ In Rhode
8 Island, competitive supply customers paid \$55 million more over five years than they would have
9 paid if they had been on Standard Offer (default service), \$28 million of which was paid by
10 residential customers.³⁷

11 This data demonstrates a clear pattern. Suppliers overcharge residential consumers, and low
12 income and minority customers are disproportionately overcharged. Considering the above cited
13 data in this proceeding, it seems Duquesne's service territory may be no exception.

³⁴ See Id.

³⁵ Abell Report at 2, 10; see also Susan M. Baldwin and Sarah M. Bosley, obo Maryland Office of People's Counsel, Maryland's Residential Electric and Gas Supply Markets: Where Do We Go from Here? (Nov. 2018) at vi, (hereinafter "OPC Report") (Residential consumers pay \$54.9 million more annually for electricity and gas than if they had purchased energy from their utilities.)

³⁶ "OCC Fact Sheet: Electric Supplier Market, September 2017 through August 2018," Office of Consumer Counsel, updated on September 26, 2018, available at:
https://www.ct.gov/occ/lib/occ/fact_sheet_electric_supplier_market_august_2018.pdf

³⁷ "DPUC Enacts New Rules for Competitive Electricity Suppliers Initiates Review of Competitive Supply Marketplace," Rhode Island Division of Public Utilities & Carriers, Press Release, May 8, 2018 (hereinafter "RI DPUC Press Release"); see also OPC Report at 35; see also Susan Campbell, Switching to a competitive power supplier could cost you, data shows, WPRI 12 Providence, Aug 8, 2018, available at:
<https://www.wpri.com/news/switching-to-a-competitive-power-supplier-could-cost-you-data-shows/>.

1 **III. ELECTRIC VEHICLE TIME OF USE RATE (EV-TOU)**

2 **Q: Please summarize Duquesne’s EV-TOU Rate Proposal.**

3 A: Residential and Small or Medium Commercial and Industrial (C&I) customers who use
4 <200kW and who own or lease a plug-in battery electric vehicle or a plug-in hybrid electric
5 vehicle – or who offer charging infrastructure to employees or visitors – will be eligible for a
6 whole-premises EV-TOU rate.³⁸ Duquesne’s proposal is designed to help promote the adoption
7 of EVs in Duquesne’s service territory and to incentivize charging during off-peak night-time
8 hours.³⁹ Duquesne proposes to exclude customers enrolled in its Customer Assistance Program
9 (CAP) from the EV-TOU rate, as well as those who participate in virtual meter aggregation or
10 budget billing.⁴⁰ To enroll, a residential customer must complete a registration form and provide
11 a copy of their EV registration or related documentation.⁴¹ Once enrolled, customers will remain
12 on the rate until they opt out.⁴² Duquesne proposes to “monitor customer response to the EV-
13 TOU Pilot Program and will continue to evaluate technology options for potential
14 deployment.”⁴³ Duquesne estimates that, by the end of the pilot, 25% of eligible EV owners in
15 its service territory (4,031) will enroll in the rate option.⁴⁴ It plans to spend approximately
16 \$227,900 on EV-TOU marketing and education costs, which will be recovered from default
17 service customers.⁴⁵

³⁸ Duquesne St. 1 at 20-21; Duquesne St. 2 at 14-15; Duquesne St. 5 at 22. Applying the EV-TOU rate to the whole premises is designed to avoid the need for installation of a separate meter.

³⁹ Duquesne St. 2 at 17.

⁴⁰ Duquesne St. 5 at 23.

⁴¹ Duquesne St. 5 at 23-24.

⁴² Duquesne St. 5 at 24.

⁴³ Duquesne St. 5 at 22.

⁴⁴ Duquesne St. 5 at 26.

⁴⁵ Duquesne St. 5, Exhibit KMS-2; Duquesne St. 2 at 20.

1 **Q: Do you agree with Duquesne’s decision to exclude CAP customers from its proposed**
2 **EV-TOU rate?**

3 A: Yes. First, TOU rates are not compatible with CAP. The purpose of CAP is to provide low
4 income households with an affordable bill based on the participant’s household income. When
5 the cost of service for a CAP customer increases above the PTC, as is distinctly possible for
6 customers who subscribe to a TOU rate (as explained below), there are three possible outcomes:
7 (1) the CAP customer will be charged higher overall rates, and may exceed their total maximum
8 annual CAP benefits prematurely; (2) residential consumers who finance CAP through rates will
9 pay more for the program, as the amount of credits applied to the CAP bill may increase
10 dramatically to reach the target level of affordability; or (3) the increased cost will be shared by
11 both CAP participants and residential consumers. Each of these potential outcomes is untenable,
12 and undercuts the explicit statutory goals and purpose of CAP to provide an affordable bill to
13 economically vulnerable households.⁴⁶

14 Also, more generally, economically vulnerable households often have very little
15 discretionary energy usage, such as washing machines, dish washers, and other large appliances,
16 and are more likely to live in smaller homes with less efficient heating and cooling spaces – all
17 factors which make it difficult to shift load during peak periods.⁴⁷ Consumers who are home
18 during the day or are reliant on electric-powered medical devices are at even greater risk, as usage

⁴⁶ Duquesne is correct in excluding CAP customers from its proposed EV-TOU rate and I agree with its proposal. Ironically, in light of this prudent step, DLCs determination to begin to enable CAP customers to shop, is simply incongruous.

⁴⁷ See John T. Colgan et al., Guidance for Utilities Commissions on Time of Use Rates: A Shared Perspective from Consumer and Clean Energy Advocates, at 26-27, Equity and Distributional Bill Impacts (July 15, 2017), <https://uspirg.org/sites/pirg/files/reports/TOU-Paper-7.17.17.pdf>; see also Lee V. White & Nicole Sintov, Health and Financial Impacts of Demand-Side Response Measures Differ Across Sociodemographic Groups, *Nature & Energy* Vol. 5 (Jan. 2020).

1 curtailment during peak hours can have an immediate and substantial impact on health outcomes.⁴⁸
2 This includes seniors, individuals with disabilities, and families with young children – all of whom
3 are generally more likely to be low income or income constrained. For these households, usage
4 patterns are often fixed or otherwise inflexible. Indeed, safety and health concerns dictate that a
5 household cannot turn off their air conditioner during the hottest hours of the day if they are home
6 during those hours. Imposing time-varying pricing on consumers with fixed or inflexible usage
7 patterns could disproportionately increase the cost of energy for Pennsylvania’s most vulnerable
8 consumers, and therefore is an inappropriate rate structure for CAP customers.

9 For these reasons, I support Duquesne’s decision to exclude CAP customers from the EV-
10 TOU.

11 **Q: Is Duquesne’s proposed CAP exclusion adequate to protect economically and**
12 **medically vulnerable residents from higher costs as a result of time varying rates?**

13 A: No. Although, Duquesne’s proposal to protect CAP customers from rate variability
14 associated with the TOU rate proposal is an important consideration, it does not fully protect other
15 vulnerable consumers who do not have the ability to meaningfully shift or reduce their electric
16 load through the day. As I just explained, time varying rates expose all economically vulnerable
17 households to increased risks of significant financial harm and negative health impacts. A recent
18 study of time varying rates across sociodemographic groups, published in January 2020, found
19 that “assignment to TOU [rates] ... disproportionately increases bills for households with elderly
20 and disabled occupants, and *predicts worse health outcomes for households with disabled or ethnic*
21 *minority occupants than those for non-vulnerable counterparts.*”⁴⁹ The researchers explained that

⁴⁸ See *id.*

⁴⁹ Lee V. White & Nicole Sintov, Health and Financial Impacts of Demand-Side Response Measures Differ Across Sociodemographic Groups, *Nature & Energy* Vol. 5 (Jan. 2020) (emphasis added).

1 this health nexus with TOU rates may be attributable to service deprivation during peak periods –
2 particularly amongst Hispanic customers and customers with a disability.⁵⁰

3 Given the unique financial and health-related impacts of time varying rates on vulnerable
4 low income populations and communities of color, I recommend that Duquesne implement
5 additional protections for all confirmed low income customers – as well as those with known
6 medical usage. Households identified as low income and those with identified medical usage
7 should first receive targeted and personalized outreach about available universal service programs
8 – including CAP, hardship fund grants, and energy efficiency and usage reduction programs – to
9 help resolve affordability concerns. If the household still wishes to enroll in the TOU rate, instead
10 of enrolling in CAP or other assistance program, they should receive an individualized bill impact
11 assessment based on their actual usage patterns over the prior year so that they can determine, with
12 specificity, what the bill impact will be if they decide to knowingly and voluntarily opt in to a TOU
13 rate.

14 Importantly, I recognize that it is highly unlikely that a low income consumer would qualify
15 for Duquesne’s proposed EV-TOU rate option, as it is highly unlikely that a low income consumer
16 would own, lease, or even rent a plug-in electric vehicle given the current cost of such vehicles.
17 Nevertheless, I believe my recommendations are prudent and appropriate to adopt now as part of
18 the proposed pilot in order to gain experience with implementation of these critical consumer
19 protections in the event Duquesne expands the TOU option to all residential consumers or the price
20 of electric vehicles somehow drops precipitously over the next few years.

⁵⁰ Id.

1 **Q: Is Duquesne’s plan to “monitor customer response to the EV-TOU Pilot Program”⁵¹**
2 **adequate to provide a meaningful analysis of its EV-TOU pilot program?**

3 A: No. While I am supportive of Duquesne’s plan to monitor customer response, Duquesne
4 should also conduct a data-driven evaluation of its pilot to ensure that the program is beneficial.
5 Specifically, I recommend that Duquesne conduct a third-party evaluation of its pilot that
6 specifically assesses the demographics of EV-TOU participants, the benefits participants derive
7 from the program, and the costs borne by other ratepayers. To facilitate such an evaluation,
8 Duquesne should specifically track participant income, age, race, ethnicity, and disability status.
9 This type of holistic evaluation is especially important, given Duquesne is proposing to recover
10 the costs of marketing the EV-TOU rate from default service customers – rather than from EV-
11 TOU participants. Duquesne should conduct a thorough assessment of the pilot to ensure that low
12 income households who cannot afford to adopt an electric vehicle are not subsidizing electric
13 vehicle adoption by higher income households. This information will also be helpful to assessing
14 any expansion of the TOU rate option to residential customers that do not own an electric vehicle.

15 **Q: Do you have any further observations or recommendations regarding Duquesne’s**
16 **proposed EV-TOU?**

17 A: Yes. As designed, Duquesne’s EV-TOU will only be available to those commercial
18 customers classified as small and medium with <200kW usage. Duquesne should be required to
19 design and implement an EV-TOU rate for mass transit fleet charging in its next Default Service
20 Plan. While Duquesne’s proposed EV-TOU rate generally benefits higher income individuals,
21 who can afford to purchase or lease an electric vehicle, mass transit and fleet electrification benefits
22 a much broader swath of the community.

⁵¹ Duquesne St. 5 at 22.

1 **IV. STANDARD OFFER PROGRAM**

2 **Q: Please summarize Duquesne’s proposed Standard Offer Program.**

3 A: If a customer contacts Duquesne to (1) initiate or move service, (2) discuss competitive
4 market choices, (3) resolve a high bill concern, or (4) inquire about the SOP, the customer is
5 provided with information about the SOP after their specific inquiry is resolved.⁵² Customers that
6 enroll receive a 12-month fixed price contract at 7% below the price to compare (PTC) at the time
7 they enter the program.⁵³ An SOP customer may leave the program “without penalty” at any time
8 during the 12-month contract period.⁵⁴

9 Currently, Duquesne administers the SOP in-house, at an estimated annual administrative
10 cost of \$62,200, and recovers only about one-third (\$21,000) of that cost from suppliers through
11 its current \$10.28 acquisition fee.⁵⁵ Duquesne proposes to engage a third-party vendor –
12 AllConnect – to administer its SOP, and to increase the supplier acquisition fee to \$30.00.⁵⁶
13 Duquesne also proposes to make substantial changes to its SOP scripting – both internally and for
14 its third party vendor.⁵⁷

15 Duquesne notes that its current SOP has a 79% referral-to-enrollment rate for residential
16 customers.⁵⁸ In shifting to a third-party vendor and making changes to its program scripting,
17 consistent with the FirstEnergy SOP model, Duquesne believes it could substantially increase its

⁵² Duquesne St. 5 at 3.

⁵³ Duquesne St. 5 at 3.

⁵⁴ Duquesne St. 5 at 3.

⁵⁵ Duquesne St. 5 at 4-5.

⁵⁶ Duquesne St. 5 at 10.

⁵⁷ Duquesne St. 5 at 6-7.

⁵⁸ Duquesne St. 5 at 3-4.

1 referral and referral to enrollment rates consistent with the enrollment rates of the FirstEnergy
2 Companies.⁵⁹

3 **Q: Do you have any concerns about Duquesne's SOP proposal?**

4 A: Yes. I am concerned that Duquesne is offering SOP to all customers who contact Duquesne
5 regarding high bill concerns who may otherwise be eligible for enrollment in its Customer
6 Assistance Program (CAP). While Duquesne does not offer the SOP to customers who are actively
7 enrolled in CAP,⁶⁰ it is unclear at this point from available information whether Duquesne first
8 screens high bill calls for CAP eligibility and - if eligible for CAP – whether the customer is
9 nevertheless referred to SOP at the end of the call.⁶¹

10 When a customer contacts Duquesne regarding a high bill, it is often because the customer
11 cannot afford to pay their bill. Customers who cannot afford to pay their bill are often in a state
12 of high-stress, desperate for financial resources, and are particularly susceptible to promised
13 savings - making it (at best) an inopportune time for marketing activities that may result in higher
14 rates at the conclusion of the SOP. This is especially so when, instead of referral to SOP, a
15 universal service program could more appropriately resolve the customers' high bill issue by
16 providing targeted affordability and arrearage forgiveness. If referred to CAP, the customer should
17 not also be transferred a third party vendor to discuss enrollment in the SOP. Indeed, it would be
18 a very rare circumstance, if ever, in which Duquesne's SOP would provide a more beneficial rate
19 than Duquesne's CAP.

⁵⁹ Duquesne St. 5 at 8.

⁶⁰ OCA to Duquesne I-6a.

⁶¹ CAUSE-PA submitted discovery to clarify this question; however, responses are not due until after the submission of my testimony. I note here too that Duquesne is correct in excluding CAP customers from its SOP. However, it is again troubling that, in light of this prudent exclusion, DLC is nevertheless proposing to begin to enable CAP customers to shop.

1 Currently Duquesne's CAP customers cannot shop and, even if Duquesne's CAP shopping
2 proposal is approved (which, as discussed below, I do not recommend), CAP customers would
3 still be ineligible for the SOP. While a customer who is referred to both CAP and SOP could
4 nevertheless enroll in CAP by withdrawing from the SOP, this would cause unnecessary hassle for
5 the customer and the supplier would incur an unnecessary referral fee.

6 **Q: Do you have any recommendations regarding referrals for high bill calls?**

7 A: Yes. Duquesne should be required to actively screen high bill calls for CAP eligibility. If
8 eligible, consumers with high bill concerns should be referred to CAP, other appropriate universal
9 services, and LIHEAP (when available), and should not also be referred to the SOP at the
10 conclusion of the call.

11 **Q: Do you believe Duquesne's SOP is beneficial to residential customers?**

12 A: There is insufficient data available in this proceeding to make such a determination.
13 Ostensibly, a 7% discount off the price to compare for a 12 month period is beneficial to residential
14 ratepayers. However, the SOP does not appear to actively teach residential consumers how to
15 engage in the competitive market, and how to assess the merit of offers. Essentially, the program
16 funnels new and moving customers into the competitive market without providing the proper
17 supports for the customer to learn about and engage in the market to determine whether shopping
18 is right for them. This is a serious deficiency that very well may be doing more harm than good
19 over time.

20 At the conclusion of the 12-month SOP contract period, it is unclear from available data
21 whether residential consumers are actively engaging in the competitive market to select a
22 beneficial rate at the end of the SOP contract period. Based on decades of experience working
23 directly with consumers, I believe it is most likely that households do not actively engage with the

1 competitive market at the end of the SOP contract, and are therefore at a higher risk of being rolled
2 into a high cost, variable rate contract. This conclusion is consistent with the residential shopping
3 data I presented above showing that, notwithstanding the fact that thousands of SOP participants
4 received an initial 7% discount off the price to compare for a full year, residential shopping
5 customers as a whole were nevertheless consistently charged, on net, millions of dollars more for
6 competitive electric supply than they would have paid if they remained on default service.

7 **Q: In support of its proposal to continue its Standard Offer Program (SOP), did**
8 **Duquesne conduct any analysis of the price that customers participating in the program pay**
9 **for electric supply either during or after the initial 12 month program period?**

10 A: No.⁶²

11 **Q: Did Duquesne examine the frequency with which consumers return to default service**
12 **after the initial 12 month program period?**

13 A: No.⁶³

14 **Q: Has Duquesne conducted any survey or assessment of customer satisfaction with the**
15 **SOP?**

16 A: No.⁶⁴

17 **Q: Are you aware of any other utility that has performed an analysis of its SOP?**

18 A: Yes. PPL Electric conducted an in-depth review of its customers who participated in its
19 SOP from 2015 through 2019 – and examined those customers' shopping decisions for four
20 months after the end of their SOP contract.⁶⁵ In its study, PPL concluded that the vast majority of

⁶² OCA to Duquesne Set I-13.

⁶³ OCA to Duquesne Set I-16.

⁶⁴ OCA to Duquesne Set I-20.

⁶⁵ Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period June 1, 2021 through May 31, 2025, Direct Testimony of Michelle LaWall-Schmidt, Docket No. 2020-3019356, at 8-12 (filed March 25, 2020).

1 its residential SOP customers – roughly 72% – did not make any affirmative decision at the
2 expiration of their contract, and instead rolled onto a new contract.⁶⁶ PPL conducted an assessment
3 of the rates that these residential customers paid after the conclusion of the SOP, and found that
4 93% of residential customers who took no affirmative action to select a new supplier or return to
5 default service paid more than the PTC in the first month.⁶⁷ That number rose to 94% within 4
6 months after their SOP contract ended, 89% of which were paying 10% or more over the applicable
7 PTC.⁶⁸ Just 6% of these customers were paying at or below the PTC within 4 months of their
8 contract ending.⁶⁹

9 **Q: Is it reasonable to conclude that Duquesne’s residential SOP customers are likely to**
10 **follow the same patterns?**

11 A: Yes. While Duquesne and PPL serve different geographic regions, my experience is that
12 the behavior of residential consumers in this context is generally consistent and does not vary by
13 geographic region.

14 **Q: Do you have any recommendations for improvements to Duquesne’s SOP?**

15 A: Yes. Based on the evidence of excessive residential shopping rates, both in this proceeding
16 and in other Commission proceedings, I recommend that Duquesne amend its SOP to return
17 customers to default service if they do not make an affirmative decision to stay with their current
18 supplier or select a new competitive supplier at the end of the 12 month SOP contract. Duquesne
19 should be required to conduct outreach to SOP customers about their shopping decision throughout
20 the 12-month SOP contract, especially in the month leading up to the expiration of the SOP
21 contract, to educate them about their options and to provide information about how to compare

⁶⁶ Id. at 9.

⁶⁷ Id. at 11-12.

⁶⁸ Id. at 12.

⁶⁹ Id.

1 and select an offer that is right for them. Adoption of my recommendation would ensure that the
2 SOP is actively teaching consumers about how to engage with the competitive market at the outset
3 of the SOP process and at its conclusion – rather than serving as a mere funnel to the market.

4 Finally, I recommend that Duquesne conduct an analysis of its SOP, similar to the analysis
5 PPL conducted of its SOP, to identify whether consumers are being charged excessive rates at the
6 conclusion of the SOP.

7 **Q: Does your recommendation serve any other important competitive market purposes?**

8 A: Yes. Actively educating consumers about how to effectively engage in the competitive
9 market while ensuring reasonable protections from excessive pricing will help encourage
10 consumer confidence in the market and will promote a healthy and vibrant market that requires
11 suppliers to actively compete for market share. Unfortunately, the competitive market has been
12 subject to repeated abuses that have caused consumers to lose confidence in the market.⁷⁰

⁷⁰ Over the last 8 years, marketers have continually accused marketers of having violated state and federal law and the Commission's regulations. Issues with deceptive marketing and unauthorized switching (slamming) arose almost immediately after the price caps were lifted, and have not subsided. PUC v. Public Power, M-2012-2257858; PUC v. MX Energy, M-2012-2201861; IDT Energy, M-2013-2314312; PUC v. APG&E, M-2013-2311811; PUC v. Pa G&E, M-2013-2325122; PUC v. ResCom Energy, M-2013-2320112; see also Pa. PUC, 2018 Utility Consumer Activities Report and Evaluation (UCARE), at 9 (Dec. 2019). Since then, despite further, repeated, and increasingly aggressive Commission guidance and enforcement actions, BIE has found it necessary to bring action against suppliers who have nevertheless continued this problematic behavior. See PUC v. Respond Power, C-2014-2427659, C-2014-2438640; PUC v. IDT Energy, C-2014-2427657; PUC v. Hiko Energy, C-2014-2427652, C-2014-2431410; PUC v. Blue Pilot Energy, C-2014-2427655; PUC v. Energy Service Providers D/B/A PA G & E, C-2014-2427656; PUC v. Clearview Electric, C-2016-2543592; PUC v. Plymouth Rock Energy, C-2016-2579276. Since then, despite further, repeated, and increasingly aggressive Commission guidance and enforcement actions, suppliers have continued this problematic behavior. See PUC v. Liberty Power Holdings LLC, M-2019-2568471; PUC v. Vista Energy Marketing LP, M-2019-2633094; PUC v. Astral Energy LLC, M-2018-2529738; PUC v. Residential Energy, M-2017-2511372; PUC v. Vista Energy Marketing LLC, M-2018-2624484; PUC v. WGL Energy Services, M-2015-2401964; PUC v. SFE Energy Services, M-2016-2546422; PUC v. Choice Energy LLC, C-2016-2581006; PUC v. American Power & Gas of PA, M-2017-2508002; PUC v. Liberty Power Holdings LLC, M-2019-2568471; PUC v. Oasis Power, F-2017-2618558; PUC v. American Power & Gas of PA, M-2017-2508002; see also PUC, 2018 Utility Consumer Activities Report and Evaluation (UCARE) at 9, http://www.puc.state.pa.us/filing_resources/consumer_activities_report_evaluation.aspx; 2017 UCARE at 8; 2016 UCARE at 8.

1 **V. CAP SHOPPING PLAN**

2 **Q: Please summarize Duquesne’s CAP Shopping Plan.**

3 A: Duquesne proposes to allow CAP customers to shop for competitive electric supply from
4 participating EGSs that agree to charge a rate “at or below the applicable residential PTC
5 throughout the duration of the contract.”⁷¹ Participating EGSs must use “rate-ready” billing, and
6 any supplier enrollment transactions for an existing CAP customer at a rate above the PTC would
7 be automatically rejected.⁷² If an EGS rate for an existing CAP customer at any time exceeds the
8 PTC, the CAP customer will be returned to default service within three business days.⁷³
9 Participating EGSs may not charge any cancellation or termination fees – or any other fees
10 unrelated to electric supply service, and at the end of the CAP customers’ contract, the customer
11 may either renew at a new compliant rate, switch to a different compliant offer, or return to default
12 service.⁷⁴

13 For newly enrolled CAP customers who are under a contract with the supplier at the time
14 of enrollment, Duquesne proposes to allow a substantial transition period – allowing non-
15 compliant fixed duration contracts to continue until the contract expires, and allowing month-to-
16 month contracts to continue for up to 120 days after the customer’s enrollment in CAP.⁷⁵
17 Duquesne is proposing to make changes to its system to provide notifications to suppliers in these
18 circumstances and to ensure that CAP customers are either given a rate lower than the PTC or
19 returned to default service at the end of the contract term.⁷⁶

⁷¹ Duquesne St. 5 at 14.

⁷² Duquesne St. 5 at 14.

⁷³ Duquesne St. 5 at 14.

⁷⁴ Duquesne St. 5 at 14.

⁷⁵ Duquesne St. 5 at 17.

⁷⁶ Duquesne St. 5 at 18.

1 Duquesne proposes to make a number of changes to its billing system to support its CAP
2 shopping plan, at an estimated cost of \$160,000.⁷⁷ Of this amount, \$120,000 of which will be
3 recovered through rates and \$40,000 which will be recovered through Duquesne's Universal
4 Service Charge.⁷⁸

5 Finally, participating EGSs who wish to serve CAP customers will be required to execute
6 an affidavit "CAP Notice" to affirm that it intends to market to and enroll CAP customers, and
7 indicating that it understands and agrees to comply with the CAP rules.

8 **Q: Do you support Duquesne's CAP shopping proposal?**

9 A: No. As I will explain in further detail below, and based on substantial evidence of
10 persistent high supplier costs even in service territories with CAP shopping restrictions in place, I
11 do not believe that CAP shopping should be permitted at this time.

12 **Q: Does Duquesne have a significant low income population in its service territory?**

13 A: Yes. As I explained above, Duquesne tracks its low income population using both a
14 confirmed low income and estimated low income customer count. These metrics reveal that
15 Duquesne has roughly 50,000-100,000 low income customers in its service territory.⁷⁹ Duquesne
16 also has a significant number of customers actively enrolled in CAP. As of December 31, 2018,
17 the last date that this data was publicly reported by the Commission, Duquesne had a CAP
18 enrollment of 36,075.⁸⁰ These customers have already demonstrated an inability to afford their
19 electric service without assistance.

⁷⁷ Duquesne St. 5 at 18-19.

⁷⁸ Duquesne St. 5 at 18-19.

⁷⁹ See 2018 Universal Service Report at 5,7.

⁸⁰ 2018 Universal Service Report at 51.

1 Table 6 provides a quick glance at the metrics for Duquesne’s low income customer
 2 population in 2018, the most recent year for which this data was publicly reported by the
 3 Commission.

4 **Table 6 – Duquesne Low Income Population**⁸¹

Company	Number of Confirmed Low-Income Customers	Percentage of Customers who are Confirmed Low-Income Customers	Estimated Number of Low-Income Customers	Percentage of Customers who are Estimated to be Low-Income	Number of Active CAP Customers as of 12/31/18	CAP Participation Rate
Duquesne	49,346	9.2%	95,316	17.8%	36,075	73.1%
EDC Total / Avg	640,352	12.8%	1,247,801	24.9%	269,402	39.5%

5
 6 Importantly, in light of the ongoing pandemic, and the unprecedented economic and job
 7 losses that have occurred over the last four months, the number of low income households in
 8 Duquesne’s service territory may have increased precipitously. Unfortunately, there is no way of
 9 knowing whether and to what extent the economy will recover in the coming years – I am
 10 concerned we are likely entering a devastatingly difficult and long-term economic recovery period,
 11 especially for low income households.

12 **Q: Is home energy affordability a serious issue for Duquesne’s low-income customers?**

13 A: Yes, very serious. Energy insecurity – or the inability to afford basic energy services –
 14 threatens stable and continued housing, employment, and education; has substantial and long-term
 15 impacts on mental and physical health; creates serious risks to the household and the larger
 16 community; and negatively impacts the greater economy.⁸² Even in relatively good economic

⁸¹ 2018 Universal Service Report at 5, 6, 51.

⁸² See Diana Hernandez, Understanding Energy Insecurity and Why It Matters to Health, 167 Soc. Science Medicine (Oct. 2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5114037/>; see also Diana Hernandez, Yumiko Aratani, and Yang Jiang, Energy Insecurity Among Families with Children (Jan. 2014), http://www.nccp.org/publications/pub_1086.html.

1 periods, low-income families struggle to make ends meet each month, and are often unable to
2 afford basic energy services. These households are often forced to choose between critical
3 necessities each month, including housing, food, water, heat, and medicine.⁸³

4 Even with financial assistance, low-income households are often still unable to afford the
5 cost of energy: According to a 2018 survey conducted by the National Energy Assistance
6 Directors' Association, 72% of LIHEAP recipients reported that they forego other necessities to
7 afford energy, and 26% reported keeping their home at unsafe or unhealthy temperatures.⁸⁴ Indeed,
8 as recent research and data has continually and repeatedly showed, many vulnerable low-income
9 and minority families simply cannot afford the cost of energy services.

10 Ultimately, any increase in rates necessarily results in increased unaffordability, and is
11 likely to result in a corresponding increase in uncollectible expenses and, in turn, involuntary
12 payment-related terminations. These impacts can and do have a deep and lasting impact on the
13 health and wellbeing of those in the household and the welfare of the community as a whole.
14 Indeed, a recent report of Pennsylvania's Joint State Government Commission on Homelessness
15 found that utility assistance ranked in the top three types of assistance noted by survey respondents
16 (24.1 percent) that would have prevented homelessness.⁸⁵

⁸³ According to the US Energy Information Administration, roughly 1 in 5 households in 2015 – when the economy was experiencing a relatively prosperous economic period – reported that they had to reduce or forego other critical necessities like food and medicine to afford their home energy costs, and more than 1 in 10 reported keeping their home at an unsafe or unhealthy temperature. See US EIA, Residential Energy Consumption Survey (2015), <https://www.eia.gov/consumption/residential/reports/2015/energybills/>; see also NEADA, 2018 National Energy Assistance Survey, at 17, 20 (Dec. 2018), <http://neada.org/wp-content/uploads/2015/03/liheapsurvey2018.pdf> (hereinafter NEADA Survey).

⁸⁴ NEADA Survey at 17, 20.

⁸⁵ Joint State Government Commission, Homelessness in Pennsylvania: Causes, Impacts, and Solutions, at 112, 157, 160 (April 2016), available at http://jsg.legis.state.pa.us/publications.cfm?JSPU_PUBLN_ID=447 (“When asked if there were any services that may have prevented them from becoming homeless, the women responded overwhelmingly that assistance with past-due rent and utilities, security deposit, and first and last months’ rent would have been most beneficial.”).

1 Importantly, CAP is not a panacea to resolve energy insecurity. The average CAP
2 household is desperately poor, and these extremely low income households routinely run out of
3 money even with the assistance of CAP. In 2018, the average CAP participant’s household income
4 was just \$14,291.⁸⁶ For context, this level of income was just over 50% of the federal poverty
5 level for a family of four in that year. Put simply, Duquesne’s confirmed low-income customers
6 are economically vulnerable and unable to pay for essential services like electricity without
7 substantial and meaningful assistance. It is precisely for this reason that CAPs were created to
8 assist low-income customers maintain and afford utility service.

9 **Q: Please explain CAP generally.**

10 A: As a regulated public utility serving more than 100,000 customers, Duquesne is required
11 to offer an integrated package of universal service programs, including a Customer Assistance
12 Program, designed to help low-income, payment troubled ratepayers maintain and afford essential
13 utility services. These programs are statutorily required by the Choice Act⁸⁷ and are further subject
14 to Commission regulations.⁸⁸

15 CAP programs provide a discounted bill for payment troubled, low-income ratepayers with
16 household incomes at or below 150% of the federal poverty income guidelines. CAP programs
17 also provide the benefit of allowing these households to have their pre-CAP arrearages frozen and
18 forgiven over time through payment of on-time, in-full CAP payments over a period of years.

19 The universal service provisions of the Choice Act tie the affordability of electric service
20 to a customer’s ability to pay for that service: The Choice Act requires the Commission to ensure
21 that utilities appropriately fund and make available the programs and services necessary to achieve

⁸⁶ See US Dep’t of Health and Human Services, 2018 Federal Income Poverty Guidelines,
<https://aspe.hhs.gov/2018-poverty-guidelines>.

⁸⁷ See 66 Pa. C.S. §§ 2802(10), (17); 2804(9).

⁸⁸ 52 Pa. Code 54.71 et seq.

1 affordability of electric service in each electric distribution territory.⁸⁹ The statutory goals of
2 universal service are achieved through the enactment, establishment and maintenance of policies,
3 practices and services that help low-income customers maintain their electric service. Universal
4 service programs include the special rates or discounts provided by CAP, energy efficiency,
5 service termination protections, and consumer education.⁹⁰ While, due to Duquesne's proposal to
6 dramatically change its current policy regarding CAP shopping, I primarily focus on CAP in the
7 context of this proceeding, it is important to realize that each of Duquesne's universal service
8 programs – CAP, LIURP, CARES, and Hardship Funds – offer essential services. All universal
9 service programs are intended to work together to allow low-income households access to an
10 affordable, safe and reliable electric supply.

11 **Q: How is Duquesne's CAP structured to provide assistance to low income participants?**

12 A: Duquesne is in the midst of a transition in CAP design from its current Percentage of
13 Budget Bill (POBB) program to a percentage of income payment plan (PIPP).⁹¹ Duquesne's CAP
14 transition was approved by the Commission in 2018 to help improve longstanding affordability
15 issues within Duquesne's CAP, especially for households with income at or below 50% of the

⁸⁹ 66 Pa. C.S. § 2804(9); see also, CAUSE-PA et al. v. Pa PUC and McCloskey v. PA PUC, 120 A.3d 1087, 1103 445 CD 2014, 596 CD 2014 (Commw. Ct., July 14, 2015) (“The obligation to provide low-income programs falls on the public utility under the Choice Act, not on the EGSs. Moreover, the Choice Act expressly requires the PUC to administer these programs in a manner that is cost-effective for both the CAP participants and the non-CAP participants, who share the financial consequences of the CAP participants' EGS choice.”)

⁹⁰ 66 Pa. C.S. § 2803.

⁹¹ See Duquesne Light Co. Universal Service and Energy Conservation Plan for 2017-2019 Submitted in Compliance with 52 Pa. Code §§ 54.74, Order on Reconsideration, Docket No. M-2016-2534323, (April 19, 2018).

1 Federal Poverty Level (FPL).⁹² The redesign was planned for two phases.⁹³ In phase 1, from
 2 2018-2020, Duquesne improved the level of discount that CAP customers would receive. This
 3 first phase was to address immediate affordability concerns while Duquesne worked to upgrade its
 4 system for phase 2, when Duquesne would transition its CAP to a Percentage of Income Payment
 5 Program (PIPP).⁹⁴ As a result of delays created first by technology issues and then by the
 6 pandemic, Duquesne has not yet transitioned to a PIPP – though it is now projecting that its
 7 transition to a PIPP will be completed by November 30, 2020,⁹⁵ before its proposed CAP shopping
 8 program plan would take effect.

9 Duquesne’s current percentage of budget bill discount program charges CAP customers a
 10 fixed percentage of their budget bill each month, subject to an annual maximum CAP credit⁹⁶ limit
 11 of \$1,500 for non-electric heating customers and \$1,800 for electric heating customers.⁹⁷

12 *Percentage of Budget Bill Program:*⁹⁸

	Non-Electric Heat Residential Service	Residential Electric Heat
0-50% FPL	15%	25%
51-100% FPL	40%	60%
101-150% FPL	80%	80%

⁹² See Duquesne Light Co. Universal Service and Energy Conservation Plan for 2017-2019 Submitted in Compliance with 52 Pa. Code §§ 54.74, Order on Reconsideration, Docket No. M-2016-2534323, (April 19, 2018); see also Duquesne Light Co. Universal Service and Energy Conservation Plan for 2017-2019 Submitted in Compliance with 52 Pa. Code §§ 54.74, Order, Docket No. M-2016-2534323, at 29-30 (order entered March 23, 2017). (“The APPRISE Evaluation reveals that average Duquesne CAP customer at or below 50% FPIG has an energy burden that is three to four times higher than the recommended threshold. ... We find that Duquesne’s current CAP design is not adequate in providing reasonable assistance to those living below 50% of the FPIG.”).

⁹³ See Duquesne Light Co. Universal Service and Energy Conservation Plan for 2017-2019 Submitted in Compliance with 52 Pa. Code §§ 54.74, Order on Reconsideration, Docket No. M-2016-2534323, (April 19, 2018).

⁹⁴ Id.

⁹⁵ See Duquesne Light Co. Universal Service and Energy Conservation Plan, Letter of Duquesne Light, Docket Nos. M-2016-2534323 & M-2019-3008227 (filed July 1, 2020).

⁹⁶ The term “CAP credit” is generally used interchangeably to refer to the difference between a CAP customers’ full tariff bill and their reduced CAP rate.

⁹⁷ See Duquesne Light Co. Universal Service and Energy Conservation Plan for 2017-2019 Submitted in Compliance with 52 Pa. Code §§ 54.74, Order on Reconsideration, Docket No. M-2016-2534323, at 7 (April 19, 2018).

⁹⁸ Id.

1 Duquesne's PIPP, once implemented, will provide a more precise level of affordability by
 2 charging participants a fixed percentage of their overall gross household income. If the
 3 household's calculated payment is lower than the applicable percentage of income, the household
 4 will be charged the average bill rate. Importantly, an average bill is not a budget bill, and is not
 5 subject to reconciliation.⁹⁹

6 *Percentage of Income Program:*¹⁰⁰

	Non-Electric Heat Residential Service	Residential Electric Heat
0-50% FPL	3%	7%
51-100% FPL	4%	8%
101-150% FPL	5%	9%

7
 8 As with the percentage of bill program design, the PIPP design will also be subject to maximum
 9 tiered annual CAP credit limits:

	Non-Electric Heat Residential Service	Residential Electric Heat
0-50% FPL	\$1,600	\$2,350
51-100% FPL	\$1,400	\$1,800
101-150% FPL	\$900	\$1,300

10
 11 **Q: Who pays for Duquesne's CAP?**

12 A: Duquesne's CAP is financed through a Universal Service rider, which is charged to all
 13 non-CAP residential ratepayers.¹⁰¹ This group includes all Duquesne's non-CAP low-income
 14 customers. In 2018, other residential ratepayers paid \$51.70 annually for CAP – or roughly \$4.31
 15 per month.¹⁰²

⁹⁹ Id.

¹⁰⁰ Id.

¹⁰¹ Pa. PUC, BCS, 2018 Report on Universal Service Programs & Collections Performance, at 79 (Dec. 2019).

¹⁰² Id.

1 **Q: How does CAP shopping impact CAP customers and other residential ratepayers?**

2 A: The impact of CAP shopping varies based on program design. However, in any instance,
3 CAP shopping can either impact the rates paid by CAP customers, residential ratepayers, or both.
4 Any increase over the default service price – *even for a short time, such as in the first two months*
5 *of their transition to CAP because of a hold-over contract prior to entering CAP* – would disrupt
6 the ability of CAP to produce an affordable bill, consistent with the Commission’s established
7 energy burden standards, and would undermine the cost-effectiveness of the program for other
8 residential ratepayers.

9 Under Duquesne’s PIPP design, both CAP customers and other residential ratepayers will
10 be directly impacted by CAP shopping – though in different ways. Because the PIPP provides a
11 bill based on the customers’ applicable income, a CAP shopping customer who pays more than
12 the default service price would not experience an increase on their monthly bill. However, they
13 would more quickly reach their maximum annual CAP credit limit. Once a CAP customer reaches
14 their maximum CAP credits, they are charged their full tariff rate until the end of the program year
15 when CAP credits reset. Because a PIPP provides participants a consistent and predictable
16 monthly rate, many CAP shopping customers will not even realize they were paying excessive
17 rates until they reach their maximum CAP credits for the year and begin receiving full tariff rate
18 bills that are categorically unaffordable for the CAP participant.

19 In turn, residential ratepayers would also pay significantly higher rates if a CAP customer
20 shops for competitive electric service at a rate higher than the default service rate (again, even for
21 a short period of time). This is because, until the CAP customer reaches the maximum level of
22 CAP credits, any charge above the PTC will require a greater subsidy in order to maintain the
23 customer at the consistent applicable percent of income for the participating household.

1 As I explained at the outset of my testimony, residential and confirmed low income
2 shopping customers have paid increasingly more than the default service price. Thus, even with
3 strong protections in place limiting current CAP customers to the applicable default service price,
4 it is likely that shopping customers who enter CAP will pay more than the price to compare for a
5 period of time (up to the length of the contract, which may well be multiple years) after they enter
6 the program, negatively impacting both the participant and other ratepayers.

7 In my view, the potential adverse impact of CAP shopping on the affordability,
8 accessibility, and cost-effectiveness of CAP for both CAP participants and non-CAP residential
9 ratepayers presents an unacceptable risk of financial harm, and violates the core protections
10 required by the Choice Act. The universal service provisions of the Choice Act tie the affordability
11 of electric service to a customer's ability to pay for that service.¹⁰³ The Commission has the
12 responsibility to ensure that the means to achieve the affordability of electric service is
13 appropriately funded, cost effective, and available in each electric distribution territory. This
14 requires the enactment, establishment, and maintenance of policies, practices and services that
15 allow low-income customers to maintain their electric service.¹⁰⁴ The existence of a competitive
16 market for generation supply does not change this requirement. The Choice Act contains within it
17 the coexisting goals and obligations to promote competition as well as to protect low-income
18 customers within the competitive framework to ensure rate affordability.

19 Again, the first principal for any CAP program must be – regardless of whether a CAP
20 customer remains on default service or receives generation service from an EGS – that CAP bills
21 must remain affordable. This is a core component of the obligation that Duquesne and the

¹⁰³ 66 Pa. C.S. § 2804(9).

¹⁰⁴ 66 Pa. C.S. § 2803.

1 Commission must fulfill pursuant to the Choice Act and the Commission’s regulations.¹⁰⁵ As
2 such, I believe Duquesne’s CAP Shopping Plan presents an unacceptable risk of financial harm to
3 CAP customers and residential ratepayers, and therefore fails to fulfill these basic principles and
4 obligations regarding universal services in Pennsylvania. As such, Duquesne’s CAP shopping
5 plan must be rejected.

6 **Q: What is the basis of Duquesne’s decision to propose a CAP shopping plan in its**
7 **DSP?**

8 A: Duquesne provides two rationales for its decision to propose a CAP shopping plan. First,
9 it notes a prior settlement from its last default service proceeding, which provided that Duquesne
10 Light would “file for approval of a CAP shopping program to become effective June 1, 2021,
11 provided that other EDCs CAP shopping programs have been approved by the Commission *and*
12 *have been successfully implemented.*”¹⁰⁶ Duquesne also points to the Commission’s proposed
13 CAP shopping policy statement (Docket M-2018-3006578) as further support of its proposal,
14 noting it designed the CAP shopping plan to conform to the Commission’s proposed statement.¹⁰⁷

15 **Q: Is this an appropriate justification to support Duquesne’s proposed CAP Shopping**
16 **Plan?**

17 A: No. First, Duquesne’s reliance on the settlement provision in its last DSP proceeding is
18 misplaced. It is true that CAP shopping was implemented in PPL Electric service territory and in
19 the First Energy Companies’ service territories. But there is no evidence that CAP shopping has
20 been “*successfully implemented*” in another service territory. This is a critical distinction. As I

¹⁰⁵ 52 Pa. Code 54.71 *et seq.*; *see also*, *CAUSE-PA et al.*, 120 A.3d at 1103 (“The obligation to provide low-income programs falls on the public utility under the Choice Act, not on the EGSs. Moreover, the Choice Act expressly requires the PUC to administer these programs in a manner that is cost-effective for both the CAP participants and the non-CAP participants, who share the financial consequences of the CAP participants’ EGS choice.”)

¹⁰⁶ Duquesne St. 5 at 12 (emphasis added).

¹⁰⁷ Duquesne St. 5 at 13.

1 will explain in greater detail below, evidence from PPL Electric service territory has plainly proven
2 implementation of CAP shopping to be *unsuccessful*, creating substantial and persistent costs for
3 vulnerable CAP customers and for other residential ratepayers.¹⁰⁸ While the FirstEnergy
4 Companies' CAP shopping program differs in critical respects from PPL's CAP shopping
5 program, the aspects of PPL's CAP shopping program that created the persistent cost issues are
6 consistent across PPL and FirstEnergy's respective CAP shopping programs. Duquesne failed to
7 assess the relative success of other utilities CAP shopping programs and, as such, the terms of
8 Duquesne's last DSP settlement have not been met.

9 Duquesne's reliance on the Commission's proposed CAP shopping policy statement is
10 likewise misplaced. A proposed policy statement has no legal effect and in and of itself provides
11 no justification for Duquesne's proposal to make critical changes to its CAP that may substantially
12 impact both the affordability of CAP for CAP participants and other residential ratepayers who
13 pay for CAP. In fact, since the proposed policy statement has not been acted on by the
14 Commission, it is not yet official policy guidance of the Commission – which itself is nonbinding.
15 A proposed policy statement is a proposal, which is pending review before the Commission's duly
16 appointed Commissioners. While Commission Staff requested that EDCs “consider” the
17 Commission's Proposed CAP Shopping Policy Statement in the context of its DSP filing, the
18 Commission did not order or mandate Duquesne to do so, nor did it suggest that Duquesne should
19 implement a CAP shopping program in a vacuum without consideration of other critical factors -
20 *including an assessment of applicable shopping data and potential harms.*

¹⁰⁸ Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period June 1, 2021 through May 31, 2025, Direct Testimony of James M. Rouland, Docket No. 2020-3019356, at 79 (filed March 25, 2020); see also id. Direct Testimony of Melinda Stumpf, 14.

1 As with every proposal, Duquesne should have conducted an analysis of all available
2 information and data to determine whether exposing CAP customers to competitive shopping is
3 just and reasonable and consistent with Duquesne's statutory obligations to offer accessible,
4 appropriately funded, and cost effective universal service programs.

5 **Q: Is Duquesne's CAP shopping plan just and reasonable, and consistent with its**
6 **statutory obligations to offer accessible and appropriately funded universal service**
7 **programs?**

8 A: No. Each and every day that a CAP customer continues with a supplier at a price that
9 exceeds the price to compare, additional costs will be borne by low income CAP customers and
10 other residential ratepayers, undermining the purpose and design of universal service programs.
11 As the evidence clearly shows, it is highly likely that customers who shop either prior to or while
12 participating in CAP will pay more than the default service price. Thus, I believe that Duquesne's
13 CAP shopping proposal should be rejected in its entirety. Duquesne's current policy, which
14 prohibits CAP customers from shopping in the competitive market, has proven to be the only
15 effective and verifiable way to protect CAP customers and other residential ratepayers from
16 significant financial harm and other negative impacts to health and safety of low income
17 consumers associated with utility unaffordability. Duquesne has shown neither the appropriate
18 justification nor benefit of changing its current effective policy in exchange for one that evidence
19 indicates will be fraught with harm for all residential rate payers, CAP or non-CAP.

20 **Q: Duquesne's proposal would limit CAP customers to the applicable price to compare.**
21 **Is that enough to protect against the harms you outlined above?**

22 A: No. As I explained above, Duquesne proposes to allow a substantial transition period for
23 newly enrolled CAP customers who are enrolled in a non-compliant product – allowing non-

1 compliant fixed duration contracts to continue until the contract expires, and allowing month-to-
2 month contracts to continue for up to 120 days after the customer's enrollment in CAP.¹⁰⁹ Some
3 fixed price contracts can go on for many months or years – creating substantial cost impacts for
4 CAP customers and other residential ratepayers. Even a four month transition period, which
5 Duquesne proposes for month-to-month contracts, can create substantial increased costs. As
6 CAUSE-PA Exhibit 1 demonstrates, *residential ratepayers paid an average of \$91.55 in excess of*
7 *the price to compare in the first five months (January to May) of 2020.*¹¹⁰

8 In turn, while Duquesne proposes to conduct some monitoring of CAP supplier pricing,
9 and suggests it will automatically reject non-compliant switching requests, Duquesne admittedly
10 cannot adequately enforce its proposed CAP shopping restrictions. As Duquesne notes, it “is not
11 privy to contracts between EGSs and their customers.”¹¹¹ Thus, for customers who are shopping
12 when they enter CAP, it will be difficult for Duquesne to identify when the original contract period
13 ends. This proposed system for monitoring is inadequate to ensure that current CAP customers do
14 not enter a non-compliant offer and equally inadequate to confirm that CAP customers who enter
15 CAP are dropped by their supplier at the end of the lengthy transition period proposed in
16 Duquesne's CAP Shopping proposal.

17 While the Commission is well equipped to adjudicate complaints brought by a consumer
18 against a supplier, in the absence of such complaints, it is not well equipped to implement and/or
19 monitor compliance with CAP Shopping rules, as it lacks access to the customer data and contract
20 terms necessary to perform that type of oversight and active monitoring. Given the nature of the
21 harms associated with CAP Shopping, and the technical nature of the proposed CAP Shopping

¹⁰⁹ Duquesne St. 5 at 17.

¹¹⁰ CAUSE-PA Exhibit 1.

¹¹¹ Duquesne St. 5 at 15.

1 rules, many CAP customers may never realize – on their own – that they are paying more than the
2 PTC; that this overpayment impacts the speed with which they approach exhaustion of their
3 maximum CAP credits; that it results in additional costs to other residential ratepayers; or that
4 there are rules in place to protect them from excessive costs through CAP.

5 **Q: You noted above that PPL Electric and the First Energy Companies' CAP shopping**
6 **programs have proven to be unsuccessful. Please explain.**

7 A: PPL Electric and the four FirstEnergy Companies each have a currently approved CAP
8 shopping program, though the two programs take a slightly different approach.

9 Available data in PPL service territory suggests that – even with strong shopping
10 restrictions, CAP shopping customers still significantly overpay for competitive electric supply.
11 It is too early to tell whether the FirstEnergy Companies' CAP shopping plan is any better, as there
12 is no publicly available data to assess that program at this time. However, based on the data
13 available in PPL service territory, and the drivers creating cost overruns for PPL's CAP,
14 FirstEnergy's CAP shopping plan is likely to experience the same persistent overcharging that is
15 occurring in PPL's service territory. In any event, it is far too early and premature for Duquesne
16 to be able to assert that the First Energy CAP shopping program has been successfully
17 implemented. The mere implementation of a program is far different than determining it has been
18 successful. As I will discuss below, the PPL experience provides a particularly relevant example.

19 PPL Electric operates a CAP-SOP, which – like the standard SOP – permits CAP customers
20 to enter a 12-month contract for service at 7% off the then-applicable PTC.¹¹² After four years of
21 operating its CAP-SOP program, PPL Electric is now proposing to end CAP shopping in its service

¹¹² Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period June 1, 2021 through May 31, 2025, Direct Testimony of James M. Rouland, Docket No. 2020-3019356, at 79 (filed March 25, 2020); see also id. Direct Testimony of Melinda Stumpf, 14.

1 territory – noting that financial harms associated with CAP shopping have persisted, and that
 2 suppliers have not engaged in the program.¹¹³ Even with the shopping restrictions, CAP customers
 3 have continued to pay – on net – millions of dollars more for electricity each year in PPL’s service
 4 territory.¹¹⁴ This fact is particularly troubling, given the current lack of any participating suppliers
 5 in PPL’s CAP-SOP. Indeed, there have been no participating suppliers in PPL’s CAP-SOP since
 6 2018. In short, this means that the persistent overcharging is caused entirely by holdover contracts
 7 and/or suppliers’ failure to comply with PPL’s CAP shopping restrictions by dropping CAP
 8 customers at the expiration of their contract period.

9 PPL reported the following CAP shopping data in its latest DSP filing:

10 **CAP Shopping in PPL Electric Service Territory – Net Costs and Savings¹¹⁵**

	Incremental Costs Above PTC	Incremental Savings Below PTC	Net Incremental Cost/(Savings)
2013	\$3,102,101.99	(\$577,626.58)	\$2,524,475.41
2014	\$7,075,886.90	(\$1,260,702.83)	\$5,815,184.07
2015	\$4,143,051.93	(\$1,824,797.73)	\$2,318,254.20
2016	\$7,754,048.98	(\$299,675.37)	\$7,454,373.60
2017	\$5,733,675.86	(\$925,870.45)	\$4,807,805.41
2018	\$4,801,337.09	(\$519,755.99)	\$4,281,581.10
2019	\$3,163,412.20	(\$255,326.71)	\$2,908,085.49
2020	\$265,270.32	(\$43,797.44)	\$221,472.88
Total	\$36,038,785.27	(\$5,707,553.10)	\$30,331,232.16

11 As is the concern with Duquesne’s proposal, PPL Electric has been unable to enforce supplier
 12 adherence to its CAP shopping rules.¹¹⁶ The result – in terms of dollars and cents – is striking, and
 13 further underscores my conclusion that CAP shopping is not viable in any form, and will result in

¹¹³ Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period June 1, 2021 through May 31, 2025, Direct Testimony of Melinda Stumpf, Docket No. 2020-3019356, at 12 (filed March 25, 2020). PPL notes that it has received several complaints from CAP customers that their suppliers did not return them to default service at the end of their contract term as required by the CAP-SOP.

¹¹⁴ Id. at 12.

¹¹⁵ Id.

¹¹⁶ Id. at 14.

1 harm to CAP customers and other residential ratepayers. Because of the level of enforcement
2 needed to prevent suppliers from overcharging CAP customers, and in light of Duquesne's
3 recognized inability effectively do so given its lack of access to supplier contract terms for new
4 CAP entrants,¹¹⁷ the only reasonable resolution capable of preventing substantial financial harm
5 to CAP customer and other residential ratepayers is to maintain the status quo and prohibit CAP
6 shopping in its entirety.

7 FirstEnergy's CAP shopping program is more similar to Duquesne's proposal, in that it
8 limits CAP customers to offers that are and remain at or below the applicable price to compare.¹¹⁸
9 But FirstEnergy's CAP shopping program was only recently approved and implemented, and has
10 not yet been subject to review to determine whether the CAP shopping restrictions were effective
11 at protecting CAP customers and other residential ratepayers from unnecessary and excessive
12 costs.¹¹⁹

13 In light of the persistent harm in PPL service territory – as well as the lack available data
14 in FirstEnergy's service territory – it would be imprudent and cost-ineffective for Duquesne to
15 spend ratepayer dollars to develop, deploy, and subsequently maintain its proposed CAP shopping
16 program.

¹¹⁷ See Duquesne St. 5 at 15.

¹¹⁸ See Consolidated Petitions of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company for Approval of a Default Service Program for the Period Beginning June 1, 2019 through May 31, 2021, Final Order, Docket Nos. P-2017-2637855, -2637857, 2637858, -2637866 (order entered Feb. 28, 2019).

¹¹⁹ Id.

1 **Q: Is there any evidence to suggest that CAP customers want to shop for competitive**
2 **electric supply?**

3 A: No. In fact, Duquesne was unable to identify a single informal or formal complaint
4 regarding its restriction on CAP shopping.¹²⁰ Duquesne's proposal to spend \$160,000 to
5 implement CAP shopping,¹²¹ coupled with the inherent risk of harm associated with CAP shopping
6 to CAP customers and other residential ratepayers described above, is unjustified in light of the
7 clear lack of actual interest in the program.

8 **Q: How does Duquesne propose to educate CAP customers about CAP shopping?**

9 A: Duquesne does not mention CAP shopping education plans in its filing; however, in
10 response to discovery Duquesne explains that it will (1) provide information on its website; (2)
11 include on-bill messaging informing CAP customers that they can shop; and (3) provide training
12 to its customer service representatives and its community based organizations that administer
13 CAP.¹²² From what I can tell, this is the entirety of its outreach and education plan.

14 Even after millions of dollars in ratepayer-funded education efforts around the competitive
15 market over the last 10 years, residential consumers continue to fare poorly in the competitive
16 market as a whole. Indeed, as I explained above, residential shopping customers paid roughly
17 \$102.9 million more than the default service price over a three-year period. Notably, this \$102.9
18 million in excessive pricing was amassed just since 2017 – long after the 2014 Polar Vortex, when
19 unprecedented spikes in the competitive market caused the Commission to reform its switching
20 regulations and enhance education efforts. Duquesne and the Commission have promised effective
21 competitive shopping education for years, but education alone has proven to be ineffective to

¹²⁰ CAUSE-PA to Duquesne I-19.

¹²¹ Duquesne St. 5 at 18.

¹²² OCA to Duquesne II-11.

1 protect residential customers from excessive costs. Given this long history of educational efforts,
2 and the persistent increase in over-charging within the residential competitive market over the long
3 term, I do not see how even the most carefully crafted education effort will prevent statutorily
4 protected economically vulnerable CAP customers from falling into the same traps by which other
5 residential customers have persistently fallen victim despite existing education efforts. Yet, that
6 issue need not be further pursued in this case as Duquesne has not outlined any education program
7 in its proposal and its response to discovery requests has only underlined the anemic quality of its
8 current CAP Shopping education thinking.

9 **Q: What are your recommendations regarding Duquesne's CAP shopping proposal?**

10 A: As I noted above, I believe Duquesne's CAP shopping proposal should be rejected in its
11 entirety. Should Duquesne decide in the future to propose another CAP shopping proposal, it
12 should first be required to conduct a thorough assessment of shopping within its service territory,
13 and should specifically examine the disparate impact in low income and minority communities.
14 In addition, Duquesne should be required to examine the impact of excessive supplier pricing on
15 CAP arrearage forgiveness and residential write-off costs, of which there has never been a
16 comprehensive assessment.

17 **Q: If Duquesne's CAP shopping plan were to be approved, do you have any**
18 **recommendations for how Duquesne could improve its plan?**

19 A: As my testimony indicates, there is yet to be developed a CAP shopping plan which does
20 not result in harm to CAP participants, other ratepayers, or both. I do not believe that even the
21 most carefully crafted CAP shopping proposal can eliminate the harms inherent in individual CAP
22 participant shopping. I remain resolute in my recommendation that Duquesne's CAP shopping

1 proposal must be rejected in its entirety to prevent substantial economic harm to CAP customers
2 and residential ratepayers.

3 Yet, if Duquesne’s plan is not rejected – despite what I consider to be overwhelming data
4 evidencing the inherent risk to vulnerable consumers created by CAP shopping – then I believe
5 substantial additional safeguards and monitoring must be required to help mitigate those harms
6 before any plan is implemented.

7 First, Duquesne should amend its CAP application to allow CAP applicants to indicate
8 their desire to return to default service by checking a box on the application – rather than requiring
9 them to go through the additional and unnecessary steps of contacting their supplier to do so. The
10 Commission’s regulations are clear that a consumer does not need to go through a supplier to
11 switch back to default service “when a Commission-approved program requires the EDC to initiate
12 a change in EGS service.”¹²³ Duquesne should work with its Income Eligible Advisory Committee
13 to assist with this application amendment.

14 Second, Duquesne should require suppliers serving a new CAP entrant to provide a copy
15 of the contract, and identify the date when the contract or monthly term ends. Duquesne should
16 then automatically return the CAP customer to default service.

17 Third, Duquesne should be required to develop, adopt, and implement a comprehensive
18 CAP shopping education and outreach plan in conjunction with interested parties and members of
19 its Income Eligible Advisory Committee.

¹²³ See 52 Pa. Code § 57.172. (“When a customer or a person authorized to act on the customer’s behalf contacts the EDC to request a change from the current EGS or default service provider to a selected EGS, the EDC shall notify the customer that the selected EGS shall be contacted directly by the customer to initiate the change. *This notification requirement does not apply when a Commission-approved program requires the EDC to initiate a change in EGS service.*”)

1 Fourth, if permitted to proceed with CAP shopping, Duquesne should closely monitor,
2 track, and report on CAP shopping program data. To ensure that appropriate data points are
3 collected, Duquesne should be required to host a collaborative with stakeholders to identify the
4 data it will track.

5 Fifth, consistent with the recommendations below in section VI, I believe that Duquesne
6 must redesign its CAP bills to ensure that shopping information – including the customer’s current
7 shopping price and the price to compare – is easily identified, presented in identical format, and
8 prominently displayed to permit CAP customers to actively review the rate they are paying for
9 service. Prominent, color coded warnings should appear on CAP customer bills to remind them
10 of the CAP shopping rules, with information about how a CAP customer can report and resolve
11 supplier overcharging in violation with the CAP shopping rules. As I noted above, Duquesne’s
12 PIPP provides a stable and predictable bill amount based on the household’s annual income. As
13 such, CAP customers are unlikely to notice that they are paying a price that exceeds the price to
14 compare until after they have exceeded their maximum annual CAP credit limit and are faced with
15 the prospect of paying full tariff rates for the remainder of the program year. Thus, if CAP
16 shopping is approved, notwithstanding the mountain of data and evidence regarding sustained
17 financial harm, I recommend that Duquesne work with members of its Income Eligible Advisory
18 Group to identify ways to provide clear and prominent shopping information on the customer’s
19 CAP bill.

20 Finally, I do not believe that residential customers or CAP customers should pay for the
21 costs of implementation, or any ongoing costs associated with CAP shopping. Any costs associated
22 with CAP shopping should be recovered from suppliers who wish to participate in the program.

1 **RESIDENTIAL AND CAP BILL REVISIONS**

2 **Q: You noted at the outset of your testimony that you believe Duquesne should be**
3 **required to make changes to its bill to improve shopping information. Please explain.**

4 A: The price to compare information on Duquesne’s bill is difficult to identify and
5 understand.¹²⁴ The price to compare is on the third page of the bill, and in a separate section from
6 the supplier’s charges. In my experience, consumers generally look to their bill for the total
7 amount due and do not spend time scrutinizing the fine print on their monthly bill – making it
8 absolutely critical for shopping information to be prominently and clearly displayed on the bill for
9 easy comparison. Moreover, Duquesne’s bill-ready-billing option does not guarantee that the
10 supplier’s applicable rate will appear *anywhere* on the bill, frustrating the ability of consumers to
11 identify whether they are paying more than the price to compare.

12 **Q: What changes do you believe Duquesne should make to its residential bill?**

13 A: Duquesne should require suppliers to provide the per kWh price on each residential bill –
14 regardless of whether a supplier offers bill ready or rate ready billing. That price, and the price to
15 compare, should appear together in a stand-alone box on the front of the bill in identical format so
16 that customers can easily identify the amount they are paying and compare it to the price to
17 compare. I suggest Duquesne use colors or other indicators to flag when a consumer’s current price
18 exceeds the price to compare, and indicate the amount by which they have either saved or overpaid.
19 Duquesne should work with stakeholders through its Income Eligible Advisory Committee to
20 provide advice and input on the bill improvements to ensure that shopping information is clear,
21 transparent, and easily understandable to consumers.

¹²⁴ CAUSE-PA to Duquesne I-15a, I-15b.

1 **Q: Would your suggestions undermine the ability of suppliers to offer additional non-**
2 **energy benefits and services to consumers which may justify the additional costs?**

3 A: Absolutely not. This information will simply ensure transparency in the marketplace.
4 Consumers who have knowingly elected to pay more for electricity to access other non-energy
5 benefits will likely continue to do so. For example, consumers that elect to purchase 100%
6 renewable energy are likely to continue purchasing 100% renewable energy – even when the price
7 differential is clearly displayed on their monthly bill. My recommendation will simply protect
8 consumers who are *unknowingly* paying more than the price to compare.

9 VI. NON-BASIC CHARGES FOR BILL READY BILLING

10 **Q: What is “bill ready billing”?**

11 A: Duquesne explained “bill ready billing” as follows:

12 Bill Ready Consolidated Billing – Duquesne Light does not have the supplier’s
13 pricing points in our Customer Care & Billing system; the supplier calculates their
14 charges, and returns their charges to Duquesne Light for bill presentment. The
15 supplier charges are free-form and the supplier can include up to 11 charge lines on
16 the invoice including taxes (e.g. gross receipts, state, and county taxes). The
17 supplier can also provide up to 4 personalized bill messages on the customer’s
18 invoice.¹²⁵

19 Duquesne explained in response to discovery that it permits suppliers using bill ready billing to
20 place non-basic service charges on the customer’s utility bill.¹²⁶ From the available information,
21 Duquesne does not necessarily know whether a suppliers’ bill ready billing charges include non-
22 basic service charges. As Duquesne noted in response to a data request, “The Company does not
23 have visibility in the EGS bill ready charges, which could include prior period adjustments, non-
24 basic service charges, etc.”¹²⁷

¹²⁵ CAUSE-PA to Duquesne I-15.

¹²⁶ CAUSE-PA to Duquesne I-14.

¹²⁷ CAUSE-PA to Duquesne I-1a, at 4 n.1.

1 **Q: Do you have concerns about Duquesne’s lack of “visibility” into EGS bill ready**
2 **charges?**

3 A: Yes. Pursuant to section 56.83(3) of the Commission’s regulations, Duquesne is
4 prohibited from terminating service to a residential consumer for nonpayment of nonbasic
5 service charges. If Duquesne cannot decipher whether a supplier has included nonbasic service
6 charges in the bill ready billing charges, then it cannot proceed with terminating service to that
7 residential consumer. Likewise, Duquesne may also be in violation of its LIHEAP Vendor
8 agreement, which requires vendors to apply LIHEAP grants only to distribution and supply
9 costs.¹²⁸ These are very serious issues which require immediate attention.

10 **Q: Do you have any recommendations?**

11 A: Yes. Duquesne should require all suppliers – including those who opt to provide bill
12 ready billing – to list the price per kWh for supply directly on the bill, and separately list any
13 non-basic service charges. Unless and until this happens, Duquesne should be prohibited from
14 terminating service to any bill ready billing customer, as it would constitute a direct violation of
15 Commission regulations.

¹²⁸ See Appendix D, Low-Income Home Energy Assistance Program, 2019 Vendor Agreement - Utility.

1 VII. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

2 Q: Please summarize your conclusions and recommendations.

3 A: Throughout the course of my testimony, I provided an overview of residential customer
4 shopping, and discussed the impact of Duquesne's EV-TOU proposal, its Standard Offer
5 Program (SOP) proposal, and its Customer Assistance Program (CAP) shopping proposal. I also
6 briefly discussed deficiencies in Duquesne's residential customer bill that make it difficult for
7 consumers to easily compare the rate they pay to the applicable price to compare, and identified
8 critical issues with Duquesne's current bill-ready-billing option for suppliers. The following is a
9 high level overview of the conclusions and recommendations I made regarding each topic.

10 Residential Customer Shopping Overview

- 11 • Overall, on a net and average basis over the last three years (since January 2017),
12 Duquesne's residential shopping consumers were charged nearly \$102.9 million more
13 than they would have been charged if they did not shop.
- 14 • Since January 2017, confirmed low income customers in Duquesne's service territory
15 (not including CAP customers) were charged a *net* total of \$881,988 more than they
16 otherwise would have been charged if they remained on default service.
- 17 • Just in the first five months of 2020, confirmed low income (non-CAP) shopping
18 customers were charged an annual average of \$91.55 – or \$18.31/month – more than the
19 applicable default service price for competitive electric supply.
- 20 • During this same period, as a result of Duquesne's current prohibition against CAP
21 customer shopping, no CAP participant paid in excess of the default rate, and as a
22 consequence other residential customers were not required to subsidize that overpayment.

23 Electric Vehicle Time of Use Rate Proposal

- 24 • Time varying rates have the potential to negatively impact CAP benefits, decreasing the
25 effectiveness of CAP at delivering an affordable bill and increasing the cost of CAP to
26 other ratepayers.

- 1 • Many low income households are unable to reasonably shift usage during off peak hours,
2 as they most often do not have discretionary energy usage that could reasonably be
3 curtailed.
- 4 • Other vulnerable consumers, including seniors, individuals with disabilities, and single
5 parent families with young children (all of whom are generally more likely to be low
6 income or income constrained), often have inflexible usage patterns and are otherwise
7 unable to reasonably shift their energy usage.
- 8 • Research has revealed a link between TOU rates and poor health outcomes in low income
9 and minority communities attributable to usage deprivation.
- 10 • **Recommendations:**
 - 11 ○ Implement additional protections for all low income customers, as well as those
12 with known medical usage.
 - 13 ○ Track the income, age, race/ethnicity, and disability status of EV-TOU rate
14 participants.
 - 15 ○ Conduct a third party evaluation of TOU rates to be completed and submitted as
16 part of Duquesne's next default service plan proceeding.
 - 17 ○ Require Duquesne to design and implement an EV-TOU rate for mass transit fleet
18 charging in its next Default Service Plan.

19 **Standard Offer Program**

- 20 • Duquesne has not conducted any assessment of the price that Standard Offer Program
21 participants pay during or after the program period.
- 22 • Evidence suggests that participants in the Standard Offer Program are not actively
23 engaged in the market, and are likely to pay significantly more than the price to compare
24 at the end of the SOP contract period.
- 25 • **Recommendations:**
 - 26 ○ Return customers to default service if they do not make an affirmative decision to
27 stay with their current supplier or to select a new supplier at the end of the 12
28 month SOP contract.
 - 29 ○ Conduct outreach to SOP customers about their shopping decision throughout the
30 12-month SOP contract, especially in the month leading up to the expiration of

1 the SOP contract, to educate them about their options and provide information
2 about how to compare offers.

- 3 ○ Assess post-SOP shopping prices to determine whether consumers are being
4 charged excessive rates at the conclusion of the SOP.

5 **CAP Shopping Plan**

- 6 • Duquesne has a substantial number of low income customers in its service territory. In
7 2018, it had 49,346 confirmed low income customers and 95,316 estimated low income
8 customers.
- 9 • Energy insecurity threatens stable and continued housing, employment, and education;
10 has substantial and long-term impacts on mental and physical health; creates serious risks
11 to the household and the larger community; and negatively impacts the greater economy.
- 12 • Even with assistance, low income households are often still unable to afford the cost of
13 energy, and often forego other critical necessities – or keep their home at unsafe
14 temperatures – as a result of energy unaffordability.
- 15 • Duquesne is in the process of transitioning its CAP from a percentage of bill program that
16 provides a flat discount rate off the monthly bill to a percentage of income program that
17 provides a bill based on a percentage of the household's income.
- 18 • Education efforts alone have proven to be ineffective to protect CAP participants and
19 other residential customers from excessive costs associated with CAP shopping.
- 20 • Regardless of the structure or design of CAP, CAP shopping that exceeds the Price to
21 Compare will have one or more of the following results: (1) CAP customers will be
22 charged higher rates, and/or will prematurely exceed their maximum allotted CAP
23 credits; (2) residential ratepayers will pay more for the cost of CAP; or (3) both CAP
24 customers and other residential ratepayers will pay increased costs.
- 25 • Under Duquesne's current CAP design and its new CAP design, CAP shopping will
26 negatively impact both CAP customers and other residential ratepayers.
- 27 • Evidence from other service territories that have permitted CAP shopping with
28 reasonable restrictions has shown that suppliers are incapable of or otherwise unwilling to
29 effectively self-police their compliance with CAP shopping rules.

- 1 • Duquesne’s proposal to spend \$160,000 in ratepayer dollars to implement CAP shopping
2 is unjustified in light of the demonstrated lack of interest in such a program, coupled with
3 the inherent risk of harm associated with CAP shopping.

4 • ***Recommendations:***

- 5 ○ Reject Duquesne’s CAP Shopping Plan in its entirety.
6 ○ Require Duquesne, should it determine to proceed with an alternative CAP
7 shopping plan in the future, to first conduct a thorough assessment of shopping
8 within its service territory, and specifically examine the disparate impact in low
9 income and minority communities – as well as the impact of excessive supplier
10 pricing on arrearage forgiveness costs.

11 **Residential Customer Bills**

- 12 • Duquesne’s current residential customer bills do not clearly, consistently, and
13 transparently depict the price that a shopping customer pays for electricity, nor do they
14 clearly indicate the price to compare.

15 • ***Recommendation:***

- 16 ○ Require suppliers to provide per kWh price on each residential bill, regardless of
17 whether they follow bill ready or rate ready billing.
18 ○ Display the current shopping price and the price to compare in a prominent
19 location on the front page of the bill.
20 ○ Use colors or other prominent indicators to warn consumers when their current
21 shopping price is higher than the price to compare.

22 **Non-basic Charges for Bill Ready Billing Customers**

- 23 • Duquesne allows suppliers to use bill ready billing to place non-basic service charges on
24 a customer’s utility bill.
25 • Inclusion of undesignated non-basic service charges could result in termination of
26 residential consumers based on non-payment of supplier charges, including non-basic
27 service charges, in clear violation of the Commission’s regulations.
28 • Inclusion of undesignated non-basic service charges may violate Duquesne’s LIHEAP
29 vendor agreement, which prohibits the application of LIHEAP grants to charges other
30 than distribution and supply costs.

- 1 • **Recommendation:**
- 2 ○ Require all suppliers – including those who opt to provide bill ready billing – to
- 3 list the price per kWh for supply directly on the bill, and separately list any non-
- 4 basic service charges.
- 5 ○ Cease termination activities for any charges that may include non-basic service
- 6 charges.
- 7 **Q: Does this conclude your direct testimony?**
- 8 **A: Yes.**

**CAUSE-PA EXHIBIT 1
RESIDENTIAL SHOPPING**

CAUSE-PA EXHIBIT 1

RESIDENTIAL SHOPPING

2017-2020

Residential Shopping Customers							Residential Default Service			Average Over Default Per Residential Shopping Customer
Date	Shopping Customer Count	Shopping Usage (kWh)	Shopping Billed	Avg \$/kWh	Amount Over Avg \$/kWh Non-Shopping	Total Over Default	Default Usage (kWh)	Default Billed	Avg Default \$/kWh	
Jan-17	158,845	120,588,155	\$ 11,020,949.25	\$ 0.0914	\$ 0.0148	\$ 1,780,622.42	249,792,046	\$ 19,140,853.01	\$ 0.0766	\$ 11.21
Feb-17	164,388	103,134,132	\$ 9,494,759.81	\$ 0.0921	\$ 0.0155	\$ 1,597,571.09	219,255,483	\$ 16,788,834.98	\$ 0.0766	\$ 9.72
Mar-17	164,234	93,792,921	\$ 8,634,041.26	\$ 0.0921	\$ 0.0153	\$ 1,430,364.89	198,290,227	\$ 15,229,492.77	\$ 0.0768	\$ 8.71
Apr-17	163,381	87,299,261	\$ 8,066,563.56	\$ 0.0924	\$ 0.0156	\$ 1,359,280.78	182,480,884	\$ 14,020,174.71	\$ 0.0768	\$ 8.32
May-17	163,133	80,135,904	\$ 7,474,482.12	\$ 0.0933	\$ 0.0159	\$ 1,276,375.90	163,039,549	\$ 12,610,287.34	\$ 0.0773	\$ 7.82
Jun-17	162,488	98,388,546	\$ 9,216,650.41	\$ 0.0937	\$ 0.0163	\$ 1,602,427.25	200,129,125	\$ 15,487,857.85	\$ 0.0774	\$ 9.86
Jul-17	161,577	133,507,232	\$ 12,637,139.56	\$ 0.0947	\$ 0.0171	\$ 2,287,416.56	269,932,501	\$ 20,925,657.54	\$ 0.0775	\$ 14.16
Aug-17	161,797	139,161,836	\$ 13,267,416.56	\$ 0.0953	\$ 0.0172	\$ 2,390,721.66	285,151,781	\$ 22,287,106.19	\$ 0.0782	\$ 14.78
Sep-17	160,869	108,206,087	\$ 10,376,299.79	\$ 0.0959	\$ 0.0184	\$ 1,993,101.10	224,242,437	\$ 17,373,042.10	\$ 0.0775	\$ 12.39
Oct-17	160,847	97,159,120	\$ 9,392,929.82	\$ 0.0967	\$ 0.0189	\$ 1,831,828.57	203,168,292	\$ 15,810,927.66	\$ 0.0778	\$ 11.39
Nov-17	160,532	84,742,093	\$ 8,223,327.28	\$ 0.0970	\$ 0.0198	\$ 1,677,478.75	180,347,584	\$ 13,930,833.26	\$ 0.0772	\$ 10.45
Dec-17	161,231	101,203,185	\$ 9,901,885.68	\$ 0.0978	\$ 0.0208	\$ 2,105,667.56	220,949,935	\$ 17,020,945.51	\$ 0.0770	\$ 13.06
2017						\$ 21,332,855.53				\$ 131.86
Jan-18	161,672	135,146,532	\$ 13,141,881.92	\$ 0.0972	\$ 0.0202	\$ 2,729,889.90	300,246,164	\$ 23,131,634.58	\$ 0.0770	\$ 16.89
Feb-18	161,272	108,244,386	\$ 10,667,351.61	\$ 0.0985	\$ 0.0210	\$ 2,273,884.81	245,715,610	\$ 19,053,235.80	\$ 0.0775	\$ 14.10
Mar-18	161,104	92,958,535	\$ 9,167,248.36	\$ 0.0986	\$ 0.0213	\$ 1,978,133.39	209,573,849	\$ 16,207,769.40	\$ 0.0773	\$ 12.28
Apr-18	161,325	94,014,558	\$ 8,996,791.45	\$ 0.0957	\$ 0.0184	\$ 1,730,519.60	210,061,926	\$ 16,235,433.01	\$ 0.0773	\$ 10.73
May-18	161,401	81,694,100	\$ 8,107,750.05	\$ 0.0992	\$ 0.0216	\$ 1,768,181.41	176,951,936	\$ 13,731,700.83	\$ 0.0776	\$ 10.96
Jun-18	161,617	115,969,709	\$ 11,625,178.63	\$ 0.1002	\$ 0.0219	\$ 2,543,532.52	241,359,445	\$ 18,900,979.38	\$ 0.0783	\$ 15.74
Jul-18	162,533	145,595,505	\$ 14,597,233.64	\$ 0.1003	\$ 0.0212	\$ 3,092,591.23	300,494,619	\$ 23,744,435.90	\$ 0.0790	\$ 19.03
Aug-18	162,726	145,479,629	\$ 14,545,212.12	\$ 0.1000	\$ 0.0209	\$ 3,046,362.82	303,238,430	\$ 23,969,837.03	\$ 0.0790	\$ 18.72
Sep-18	161,645	144,104,990	\$ 14,233,193.93	\$ 0.0988	\$ 0.0197	\$ 2,838,073.65	301,456,612	\$ 23,837,719.55	\$ 0.0791	\$ 17.56
Oct-18	162,110	102,756,638	\$ 10,259,520.22	\$ 0.0998	\$ 0.0224	\$ 2,306,685.97	216,558,727	\$ 16,760,529.43	\$ 0.0774	\$ 14.23
Nov-18	162,577	89,944,966	\$ 9,082,454.90	\$ 0.1030	\$ 0.0270	\$ 2,425,361.71	194,959,860	\$ 14,429,536.35	\$ 0.0740	\$ 14.92
Dec-18	162,029	104,164,351	\$ 10,508,391.08	\$ 0.1009	\$ 0.0275	\$ 2,856,818.17	231,254,568	\$ 16,965,004.07	\$ 0.0734	\$ 17.69
2018						\$ 29,800,035.18				\$ 182.83
Jan-19	161,788	112,617,393	\$ 11,620,746.90	\$ 0.1032	\$ 0.0302	\$ 3,403,135.21	253,015,191	\$ 18,462,339.96	\$ 0.0730	\$ 21.03
Feb-19	161,590	111,704,900	\$ 11,593,384.99	\$ 0.1038	\$ 0.0311	\$ 3,470,867.47	259,711,424	\$ 18,884,673.68	\$ 0.0727	\$ 21.48
Mar-19	161,209	97,223,088	\$ 10,178,001.44	\$ 0.1047	\$ 0.0319	\$ 3,102,751.15	228,060,188	\$ 16,596,705.00	\$ 0.0728	\$ 19.25
Apr-19	159,572	80,440,515	\$ 8,466,588.35	\$ 0.1053	\$ 0.0324	\$ 2,608,091.69	186,241,262	\$ 13,563,983.51	\$ 0.0728	\$ 16.34
May-19	157,996	74,513,398	\$ 7,907,115.50	\$ 0.1061	\$ 0.0324	\$ 2,413,538.00	168,772,130	\$ 12,442,900.14	\$ 0.0737	\$ 15.28
Jun-19	156,870	91,353,607	\$ 9,626,810.08	\$ 0.1054	\$ 0.0318	\$ 2,900,714.13	206,778,999	\$ 15,224,526.20	\$ 0.0736	\$ 18.49
Jul-19	156,641	130,542,289	\$ 13,591,704.94	\$ 0.1041	\$ 0.0305	\$ 3,984,537.70	292,811,817	\$ 21,549,278.21	\$ 0.0736	\$ 25.44
Aug-19	156,017	145,429,776	\$ 15,004,138.04	\$ 0.1032	\$ 0.0295	\$ 4,296,880.02	329,755,592	\$ 24,278,234.52	\$ 0.0736	\$ 27.54
Sep-19	154,080	116,892,397	\$ 11,942,565.19	\$ 0.1022	\$ 0.0285	\$ 3,335,796.02	272,604,583	\$ 20,071,833.43	\$ 0.0736	\$ 21.65
Oct-19	152,964	92,948,949	\$ 9,509,329.87	\$ 0.1023	\$ 0.0288	\$ 2,674,469.32	221,204,433	\$ 16,265,933.84	\$ 0.0735	\$ 17.48
Nov-19	151,923	75,383,226	\$ 7,805,913.17	\$ 0.1035	\$ 0.0304	\$ 2,287,982.11	183,257,447	\$ 13,414,148.90	\$ 0.0732	\$ 15.06
Dec-19	151,725	93,006,825	\$ 9,632,230.13	\$ 0.1036	\$ 0.0318	\$ 2,938,091.01	233,384,725	\$ 16,746,105.38	\$ 0.0718	\$ 19.50
2019						\$ 37,437,453.82				\$ 238.55
Jan-20	151,875	101,925,422	\$ 10,429,138.85	\$ 0.1023	\$ 0.0325	\$ 3,212,441.92	254,791,786	\$ 17,790,222.35	\$ 0.0698	\$ 21.81
Feb-20	151,985	90,267,394	\$ 9,260,125.15	\$ 0.1026	\$ 0.0330	\$ 2,978,409.42	231,604,441	\$ 16,117,373.06	\$ 0.0696	\$ 19.60
Mar-20	151,686	84,539,358	\$ 8,728,660.26	\$ 0.1032	\$ 0.0335	\$ 2,835,720.33	216,588,158	\$ 15,097,595.27	\$ 0.0697	\$ 18.69
Apr-20	150,772	83,018,744	\$ 8,588,182.75	\$ 0.1034	\$ 0.0335	\$ 2,781,447.34	207,253,572	\$ 14,406,324.58	\$ 0.0699	\$ 18.45
20-May	149,598	77,870,542	\$ 8,044,582.98	\$ 0.1033	\$ 0.0333	\$ 2,590,953.42	193,914,174	\$ 13,580,694.94	\$ 0.0700	\$ 17.32
2020						\$ 14,498,972.43				\$ 95.87

TOTAL: \$ 102,869,316.96 \$ 649.11

*The information in this Exhibit was derived from data in CAUSE-PA to DLCI-1(a)-(h) - Revised, which provided the billing and usage data.

**CAUSE-PA EXHIBIT 2
CONFIRMED LOW INCOME SHOPPING**

CAUSE-PA EXHIBIT 2

CONFIRMED LOW INCOME NON-CAP SHOPPING DATA

2017-2020

Confirmed Low Income (CLI) Non-CAP Shopping Customers							Confirmed Low Income (CLI) Non-CAP Default Service			Average Over-Default Per CLI Non-CAP Shopping Customer
Date	Shopping CLI Customer Count	Shopping CLI Usage (kWh)	Shopping CLI Billed	Avg Shopping CLI \$/kWh	Amount CLI Shopping \$/kWh Over Default	Total CLI Shopping Over Default	Default CLI Usage (kWh)	Default CLI Billed	Avg \$/kWh	
Jan-17	1,221	932,111	\$ 76,769.59	\$ 0.0782	\$ 0.0021	\$ 2,052	5,012,329	\$ 381,331.02	\$ 0.0761	\$ 1.68
Feb-17	1,224	834,985	\$ 68,541.60	\$ 0.0821	\$ 0.0005	\$ 397	4,618,209	\$ 376,900.14	\$ 0.0816	\$ 0.32
Mar-17	1,330	795,893	\$ 63,200.39	\$ 0.0794	\$ 0.0021	\$ 1,664	4,503,947	\$ 348,232.14	\$ 0.0773	\$ 1.25
Apr-17	1,398	769,904	\$ 58,958.37	\$ 0.0766	\$ 0.0032	\$ 2,460	4,331,226	\$ 317,843.29	\$ 0.0734	\$ 1.76
May-17	1,339	606,409	\$ 48,843.07	\$ 0.0805	\$ 0.0016	\$ 991	3,426,243	\$ 270,366.51	\$ 0.0789	\$ 0.74
Jun-17	1,226	620,862	\$ 55,014.54	\$ 0.0886	\$ (0.0120)	\$ (7,450)	4,131,623	\$ 415,681.72	\$ 0.1006	\$ (6.08)
Jul-17	1,220	812,691	\$ 70,545.48	\$ 0.0868	\$ (0.0231)	\$ (18,798)	6,276,029	\$ 689,954.63	\$ 0.1099	\$ (15.41)
Aug-17	1,294	872,979	\$ 76,918.08	\$ 0.0881	\$ (0.0192)	\$ (16,774)	8,089,520	\$ 868,217.58	\$ 0.1073	\$ (12.96)
Sep-17	1,350	765,213	\$ 69,500.00	\$ 0.0908	\$ 0.0104	\$ 7,968	7,769,513	\$ 624,760.79	\$ 0.0804	\$ 5.30
Oct-17	1,417	744,893	\$ 67,003.90	\$ 0.0930	\$ 0.0001	\$ 74	7,375,187	\$ 662,669.62	\$ 0.0899	\$ 0.05
Nov-17	1,568	827,239	\$ 71,126.92	\$ 0.0860	\$ 0.0089	\$ 7,330	7,612,413	\$ 587,073.10	\$ 0.0771	\$ 4.67
Dec-17	1,656	1,076,108	\$ 98,420.62	\$ 0.0915	\$ 0.0143	\$ 15,400	9,445,314	\$ 728,696.28	\$ 0.0771	\$ 9.30
2017						\$ (4,688)				\$ (8.76)
Jan-18	1,792	1,631,452	\$ 144,949.81	\$ 0.0888	\$ 0.0112	\$ 18,340	13,165,794	\$ 1,021,739.84	\$ 0.0776	\$ 10.23
Feb-18	1,848	1,381,844	\$ 122,408.58	\$ 0.0886	\$ 0.0097	\$ 13,353	11,010,504	\$ 868,953.05	\$ 0.0789	\$ 7.23
Mar-18	1,974	1,269,242	\$ 112,213.33	\$ 0.0884	\$ 0.0115	\$ 14,592	9,502,543	\$ 730,871.76	\$ 0.0769	\$ 7.39
Apr-18	2,195	1,438,174	\$ 111,413.85	\$ 0.0775	\$ 0.0024	\$ 3,451	9,471,125	\$ 710,988.92	\$ 0.0751	\$ 1.57
May-18	2,259	1,147,244	\$ 99,168.63	\$ 0.0864	\$ 0.0079	\$ 9,075	7,235,349	\$ 568,193.56	\$ 0.0785	\$ 4.02
Jun-18	2,324	1,427,816	\$ 124,823.38	\$ 0.0874	\$ 0.0084	\$ 11,981	8,688,080	\$ 686,628.85	\$ 0.0790	\$ 5.16
Jul-18	2,399	1,822,054	\$ 158,703.93	\$ 0.0871	\$ 0.0088	\$ 15,960	10,330,937	\$ 809,347.51	\$ 0.0783	\$ 6.65
Aug-18	2,596	2,004,322	\$ 171,432.47	\$ 0.0855	\$ 0.0078	\$ 15,644	10,225,274	\$ 794,773.58	\$ 0.0777	\$ 6.03
Sep-18	2,631	2,027,966	\$ 177,142.92	\$ 0.0874	\$ 0.0088	\$ 17,818	9,508,315	\$ 747,008.89	\$ 0.0786	\$ 6.77
Oct-18	2,781	1,617,458	\$ 142,142.14	\$ 0.0879	\$ 0.0113	\$ 17,915	7,033,334	\$ 540,188.26	\$ 0.0768	\$ 6.44
Nov-18	2,812	1,645,314	\$ 152,767.65	\$ 0.0929	\$ 0.0179	\$ 29,436	6,678,068	\$ 500,582.03	\$ 0.0750	\$ 10.47
Dec-18	2,774	2,014,874	\$ 196,165.00	\$ 0.0974	\$ 0.0245	\$ 49,284	8,179,299	\$ 596,259.07	\$ 0.0729	\$ 12.72
2018						\$ 216,850				\$ 89.71
Jan-19	2,809	2,166,986	\$ 219,665.54	\$ 0.1014	\$ 0.0280	\$ 60,703	8,923,628	\$ 654,607.11	\$ 0.0734	\$ 21.61
Feb-19	2,887	2,284,452	\$ 235,610.45	\$ 0.1031	\$ 0.0304	\$ 69,514	9,158,074	\$ 665,858.35	\$ 0.0727	\$ 24.08
Mar-19	2,938	2,077,381	\$ 212,205.13	\$ 0.1022	\$ 0.0298	\$ 61,923	8,211,611	\$ 594,046.12	\$ 0.0723	\$ 21.08
Apr-19	2,991	1,691,799	\$ 170,648.85	\$ 0.1009	\$ 0.0292	\$ 49,439	6,637,457	\$ 475,545.17	\$ 0.0716	\$ 16.53
May-19	2,840	1,328,969	\$ 134,551.13	\$ 0.1012	\$ 0.0277	\$ 36,748	5,388,132	\$ 396,531.23	\$ 0.0736	\$ 12.94
Jun-19	2,567	1,325,764	\$ 135,148.58	\$ 0.1019	\$ 0.0270	\$ 35,815	5,896,963	\$ 441,831.94	\$ 0.0749	\$ 13.95
Jul-19	2,298	1,562,604	\$ 157,260.77	\$ 0.1006	\$ 0.0279	\$ 43,550	7,386,799	\$ 537,538.32	\$ 0.0728	\$ 18.95
Aug-19	2,194	1,683,268	\$ 165,326.46	\$ 0.0982	\$ 0.0245	\$ 41,188	8,169,708	\$ 602,505.01	\$ 0.0737	\$ 18.77
Sep-19	1,996	1,273,607	\$ 121,732.82	\$ 0.0956	\$ 0.0206	\$ 26,245	6,528,685	\$ 489,481.04	\$ 0.0750	\$ 13.15
Oct-19	1,878	991,622	\$ 95,062.34	\$ 0.0978	\$ 0.0215	\$ 20,919	5,384,010	\$ 410,848.17	\$ 0.0763	\$ 11.14
Nov-19	1,823	891,644	\$ 88,677.95	\$ 0.0995	\$ 0.0253	\$ 22,560	5,154,996	\$ 382,254.96	\$ 0.0742	\$ 12.38
Dec-19	1,810	1,140,178	\$ 115,057.26	\$ 0.1009	\$ 0.0264	\$ 30,113	6,825,617	\$ 508,515.10	\$ 0.0745	\$ 16.64
2019						\$ 498,717				\$ 201.21
Jan-20	1,850	1,258,363	\$ 124,541.30	\$ 0.0990	\$ 0.0287	\$ 36,064	7,911,820	\$ 556,291.04	\$ 0.0703	\$ 19.49
Feb-20	1,865	1,166,013	\$ 113,674.64	\$ 0.0975	\$ 0.0282	\$ 32,900	7,298,899	\$ 505,627.64	\$ 0.0693	\$ 17.64
Mar-20	1,873	1,108,439	\$ 111,137.76	\$ 0.1003	\$ 0.0313	\$ 34,742	6,876,953	\$ 473,974.41	\$ 0.0689	\$ 18.55
Apr-20	1,877	1,062,025	\$ 108,550.97	\$ 0.1072	\$ 0.0338	\$ 35,908	6,247,827	\$ 427,352.45	\$ 0.0684	\$ 19.13
May-20	1,882	1,011,543	\$ 100,103.83	\$ 0.0990	\$ 0.0311	\$ 31,494	5,662,560	\$ 384,075.90	\$ 0.0678	\$ 16.73
2020						\$ 173,107				\$ 91.55

TOTAL: \$ 881,988 \$ 373.72

*The information in this Exhibit was derived from data in CAUSE-PA to DLC I-2(a)-(g) - Revised, which provided the billing, usage, and customer count data for Duquesne Light's Confirmed Low Income, Non-CAP Shopping and Default Service Customers

CAUSE-PA EXHIBIT 3
Energy Assistance Summary (EASUM)
LIHEAP - Statewide Cash Grant

Energy Assistance Summary (EASUM)

9/21/2019 - 12/26/2019

STATE WIDE

Cash Demographic Report (LIH660-R01)

	ITEM	COUNT	AMOUNT	%	AVG		ITEM	COUNT	AMOUNT	%	AVG
HOUSING	Owner	85,817	\$22,835,051	39	\$266	PAYMENT SENT	Electric	58,330	\$16,189,666	27	\$278
	Renter	95,802	\$27,070,068	44	\$283		FuelOil	43,046	\$12,896,621	20	\$300
	RenterWithHeat	2,775	\$367,138	1	\$132		Coal	1,564	\$385,444	1	\$246
	SubsidizedWithHeat	6	\$2,107	0	\$351		NaturalGas	102,879	\$27,355,614	47	\$266
	SubsidizedNoHeat	31,811	\$9,376,842	14	\$295		Kerosene	3,542	\$1,128,965	2	\$319
	Roomer	117	\$19,265	0	\$165		Propane	8,313	\$2,246,759	4	\$270
	Other	3,180	\$1,083,243	1	\$341		WoodOrOther	986	\$288,787	0	\$293
RACE	AmericanIndian	363	\$113,473	0	\$313	BlendedFuel	848	\$261,858	0	\$309	
	Other	16,582	\$4,611,327	8	\$278	INCOME RANGE	0 - 999	9,369	\$8,608,671	4	\$919
	NativeHawaiian	147	\$44,873	0	\$305	1000 - 1999	1,885	\$1,609,358	1	\$854	
	Black	49,570	\$13,990,588	23	\$282	2000 - 2999	1,757	\$1,411,579	1	\$803	
	White	147,146	\$40,467,975	67	\$275	3000 - 3999	2,450	\$1,591,961	1	\$650	
	Asian	3,746	\$972,605	2	\$260	4000 - 4999	2,593	\$1,504,389	1	\$580	
	Unknown	1,954	\$552,873	1	\$283	5000 - 5999	2,735	\$1,263,586	1	\$462	
DISABLED	YES	100,414	\$23,169,211	46	\$231	6000 - 6999	3,363	\$1,369,473	2	\$407	
	NO	119,094	\$37,584,503	54	\$316	7000 - 7999	3,981	\$1,415,801	2	\$356	
AGE 60 & ABV	YES	95,769	\$22,364,456	44	\$234	8000 - 8999	5,827	\$1,793,748	3	\$308	
	NO	123,739	\$38,389,258	56	\$310	9000 - 9999	40,097	\$10,563,435	18	\$263	
AGE 5 & BLW	YES	36,414	\$10,985,937	17	\$302	10000 - 10999	10,924	\$2,575,151	5	\$236	
	NO	183,094	\$49,767,777	83	\$272	11000 - 11999	12,321	\$2,643,928	6	\$215	
PAY_TYPE	DIRECT	3,809	\$771,280	2	\$202	12000 - 12999	11,998	\$2,459,437	5	\$205	
	PROVIDER	216,171	\$60,119,971	98	\$278	13000 - 13999	12,350	\$2,466,149	6	\$200	
REFUNDS		3,137	\$587,199		\$187	14000 - 14999	13,802	\$2,743,176	6	\$199	
						15000 - 15999	11,759	\$2,334,400	5	\$199	
AVERAGE HOUSEHOLD SIZE: 2.20						16000 - 16999	11,385	\$2,260,164	5	\$199	
<div style="border: 1px solid black; padding: 5px;"> <p>* Counts, Amounts (\$), % and AVG from HOUSING, RACE, DISABLED, OVER-60 and INCOME RANGE category are from Regular payments only</p> <p>** Counts, Amounts (\$), % and AVG from PAY_TYPE category are from All Payment Types (Regular, Reissue, Secondpay, Underpay and Extraordinary)</p> <p>*** Counts, Amounts (\$), % and AVG from PAYMENT_SENT category are from All Payment Types (Regular, Reissue, Secondpay, Underpay and Extraordinary)</p> </div>						17000 - 17999	8,128	\$1,617,810	4	\$199	
						18000 - 18999	6,599	\$1,314,200	3	\$199	
						19000 - 19999	8,103	\$1,611,600	4	\$199	
						> 19999	38,074	\$7,592,924	17	\$199	
						PAYMENT TYPE	Regular	219,508	\$60,753,714		\$277
						Reissue	27	\$8,723		\$323	
						Secondpay	328	\$106,057		\$323	
						Underpay	94	\$16,360		\$174	
						Extraordinary	23	\$6,396		\$278	
						TOTAL PMT		219,980	\$60,891,250		\$277
						RECOUPMENTS		285	\$58,244		\$204
						NET PAID			\$60,833,006		
PMT SUB TYPE	APD	0	\$0		\$0						
	STD	219,980	\$60,891,251		\$277						

CAUSE-PA EXHIBIT 4
LIHEAP 2019 Vendor Agreement - Utility



Pennsylvania Department of Human Services
LOW-INCOME HOME ENERGY ASSISTANCE PROGRAM
2019 VENDOR AGREEMENT - UTILITY

Vendor Name and Address

Vendor Number

This Agreement is entered into for the purpose of facilitating the provision of Low-Income Home Energy Assistance Program (LIHEAP) benefits to low-income households through the delivery of utility service from a participating LIHEAP vendor to the LIHEAP beneficiary who is a customer of the vendor. The Commonwealth of Pennsylvania defines a LIHEAP vendor as a company or agent of the company that supplies home heating energy or service in exchange for payment. The term does not include landlords, housing authorities, hotel managers or proprietors, rental agents and other parties who are not direct suppliers of home heating, energy or service.

Eligible LIHEAP households receive one LIHEAP Cash grant based on the size, region, income and fuel type of their household. Receipt of a customer's LIHEAP Cash grant requires no data entry by the vendor. LIHEAP Crisis grants are available to LIHEAP recipients who encounter a heating emergency. Subject to the availability of funds, the Department of Human Services (DHS) may opt to provide eligible LIHEAP households with additional LIHEAP Cash or Crisis grants.

By signing this agreement, the Vendor agrees to communicate with DHS by phone and email and be responsive to DHS requests so that a customer's LIHEAP application or request for Crisis can be processed timely. The vendor also agrees to accept all LIHEAP grants and apply them to customer accounts according to the conditions of this vendor agreement and DHS instructions.

Participating LIHEAP vendors are paid through the Pennsylvania Treasury by check or direct deposit. A list of corresponding payments is posted to the LIHEAP Crisis Claim data entry system, identifying customer names, addresses and the amount of LIHEAP Cash and Crisis payments each customer will receive, associated with a specific Treasury Pay Date.

The business or company written above, herein referred to as the "vendor," cannot enter into any subcontracts under this agreement with other subcontractors who are currently suspended or debarred by the commonwealth or other state or federal government. If any vendor enters into any subcontracts under this agreement with any subcontractors who become suspended or debarred by the commonwealth or other state or federal government during the term of this agreement or any extensions or renewals thereof, the commonwealth shall have the right to require the vendor to terminate such subcontracts to remain a LIHEAP vendor.

The vendor agrees to be responsible for reimbursing the commonwealth for all necessary and reasonable costs and expenses incurred by the Office of the Inspector General or the Attorney General relating to an investigation of the vendor's compliance with the terms of this or any other agreement between the vendor and the commonwealth which results in the suspension or debarment of the vendor.

Vendors will adhere to LIHEAP policy and procedures as defined in the LIHEAP State Plan, will report any discovery of fraud, and address any questions regarding participation in LIHEAP to the LIHEAP Vendor Unit. A copy of the current LIHEAP State Plan can be obtained on the LIHEAP Vendor Website at: www.dhs.pa.gov/provider/informationforliheapvendors/index.htm.

By fully completing and submitting the signature page of the 2019 LIHEAP Vendor Agreement, the vendor agrees to comply with the following conditions to remain a LIHEAP Vendor in good standing and receive LIHEAP payments through the commonwealth:

1. Apply LIHEAP grants to customer accounts in the following manner only:
 - a) Apply the full amount of each LIHEAP benefit to the respective account of each designated LIHEAP customer. For customers who have chosen their own supplier, the entire LIHEAP grant must be applied to cover the costs of both the distribution and supply portion of the bill each month until the LIHEAP benefit has been exhausted.

- b) If a household is authorized for a LIHEAP Cash grant before the date of its request for Crisis benefits, any existing credit, **including the LIHEAP Cash grant that has been authorized and not yet received**, is considered to be available and will be used to solve the Crisis.
 - c) Late payment charges must be frozen at the amount they are at the time notification of eligibility for LIHEAP is received by the vendor and may not be increased for the remainder of the LIHEAP program year, defined as the date that applications for LIHEAP benefits are no longer accepted.
 - d) LIHEAP Cash and Crisis grants may be used for reconnection fees but will not be used for security deposits, service maintenance contracts, or other finance charges.
2. Public utilities that operate Customer Assistance Programs (CAP) will:
- a) Contact customers and attempt to enroll in CAP (if not already enrolled) when the utility becomes aware that the household is low-income, validated by receipt of a LIHEAP Cash or Crisis grant.
 - b) Apply the LIHEAP Cash grant to the customer's account in the following manner:
 - To resolve any past-due CAP payments,
 - To the current CAP payment,
 - Remaining LIHEAP funds will be credited to future CAP payments.
- NOTE: A CAP payment is the amount the customer is required to pay under the terms of the utility's CAP agreement.
3. Public utilities that operate a CAP will not consider the customer's LIHEAP benefit as an available resource in the computation that determines the amount of household's monthly CAP payment.
4. LIHEAP Cash grants received on behalf of a LIHEAP customer are available to cover utility costs for the season in which they are authorized through the end of the following heating season. See Section 7: Vendor Refunds.
5. LIHEAP Crisis grants and Cash grants that are used to resolve a Crisis may be used in the following manner:
- a) To prevent termination or restore home-heating service to a household that is without heat due to termination of the main or secondary source of heat by a utility company.
 - b) Are authorized by DHS or its representatives **in the minimum amount needed to resolve the Crisis** based on the amount listed on a utility termination notice, subject to the minimum and maximum LIHEAP Crisis benefits allowed.
 - c) The existence of a Crisis must be validated by a DHS representative, including the minimum amount needed to resolve the utility emergency. A utility's plan to terminate service is considered to be valid for 60 days from the date of the termination notice, even if service was not terminated after the 10-day period indicated on the notice.
 - d) Are only guaranteed for authorizations approved by DHS or its representatives. Every request for Crisis must be made by the LIHEAP household to its designated DHS office, which will evaluate eligibility and determine the amount the household has available to resolve the Crisis. A DHS representative will contact the vendor to convey eligibility.
 - e) Are assigned an authorization number to resolve a specific Crisis situation.
 - f) Must maintain service to such households for no less than 30 calendar days from the date of the resolution of the Crisis. In some circumstances the 30-day hold may not begin until the end of winter moratorium.
 - g) Utility companies governed by the Public Utility Commission will adhere to the winter termination procedure referred to in §601.62(2) (ii)(A) of Appendix B of the LIHEAP State Plan.
 - h) Customers approved for a LIHEAP Crisis grant related to the LIHEAP Term Program (including the Utility File Transfer Program) are not eligible to receive a duplicate LIHEAP Crisis grant pledged at the request of the household for the same 30-day pledge period.
 - i) Regulated utilities that accept a Crisis grant during the winter moratorium period (12/1- 3/31) must maintain service until at least May 1. In most instances, this precludes the issuance of an additional Crisis grant to the same utility for the same household for the remainder of the season, since the 30-day hold on the account begins on April 1.
 - j) Vendors will make every attempt to resolve the customer's heating emergency with consideration of the following time frames:
 - Before the customer is without heat;
 - Within 48 hours if the customer is already without heat; or
 - Within 18 hours if a medical emergency or life-threatening situation exists.
6. To receive payment paid in full or in part with LIHEAP Crisis funds:
- a) The vendor must perform Crisis claim data entry into a web-based program and submit documentation of the termination by mail, fax or electronic upload. Payment may be rejected if appropriate documentation is not provided.

- b) Claim processing must occur **within 30 calendar days** of the date a Crisis grant is authorized by DHS. Exceptions to the 30-day rule may be granted for claims entered on or after the 31st day and up to 30 days after the close of the LIHEAP season if funds are available.
 - c) Data entry will be for no more than the amount that was authorized by a DHS representative to resolve the emergency after subtracting available LIHEAP credits, which could include the LIHEAP Cash grant.
 - d) An active worklist of Crisis authorizations awaiting vendor action and pending Crisis claims is available on the Crisis Claim data entry system.
 - e) Acceptable Crisis documentation includes a termination or restoration notice confirming the dollar amount needed to restore service or prevent service interruption. Failure to provide adequate documentation will delay payment.
 - f) LIHEAP recipients cannot be billed for services or late payment fees as a result of a vendor's failure to comply with the conditions of this agreement.
7. Refund LIHEAP credits to DHS as required, by check or expedited recoupment, within 30 days from the date of discovery, after the basis for return is known. A LIHEAP Refund Form (HSEA 37) must accompany payment. **It is also important to indicate the individual number of the customer that was provided on the LIHEAP Provider Payment List when payment was received** and a description of the reason the funds are being returned. A user-friendly form is located on the LIHEAP Vendor website. The commonwealth cannot return vendor funds or any portion thereof to the vendor. **For this reason, LIHEAP Vendors should accurately evaluate their records and ensure the accuracy of LIHEAP refunds before submitting them to the Commonwealth of Pennsylvania.** Vendors may contact the Vendor Unit at 1-877-537-9517 to verify dates and amounts of LIHEAP grants received by the households before sending a refund check.

NOTE: Vendors will never give or refund LIHEAP funds to a customer.

LIHEAP refunds will be sent with a check payable to the **COMMONWEALTH OF PENNSYLVANIA**, directed to:

**Commonwealth of Pennsylvania
DHS-LIHEAP Vendor Refunds
P.O. Box 2675 (WOB Room 224)
Harrisburg, PA 17105-2675**

- a) **Examples when the vendor will return LIHEAP credits include, but are not limited to the following:**
 - A customer's whereabouts are unknown,
 - A customer changes vendor,
 - A customer dies, departs the area serviced by the vendor, or the customer no longer has a heating responsibility,
 - The vendor receives a duplicate payment,
 - The vendor is deactivated and is no longer a participating LIHEAP vendor,
 - LIHEAP Cash grants received in error,
 - An overpayment caused by vendor error. Vendor error includes but is not limited to: the vendor failing to provide appropriate or accurate customer account information, non-equitable pricing, LIHEAP funds were erroneously applied toward a security deposit, a billing error or application of LIHEAP funding is detected, failure to provide service, or using a communal account for LIHEAP funds. If this occurs, the vendor is responsible for reimbursement from the vendor's funds, not by removing LIHEAP credits from the customer's account.
 - The end of each LIHEAP program year. LIHEAP funds are available for use for two heating seasons, which includes the heating season of receipt and the heating season immediately following. LIHEAP funds that have not been expended must be returned to DHS by July 31 of that year. DHS will notify vendors of the need to identify accounts and return funds.
- b) DHS is authorized to recoup past-due LIHEAP balances. This is done by debiting any current or future LIHEAP payment for an amount equal to the outstanding un-refunded balance that is due to DHS from the vendor. A record of the balance of funds owed is established by DHS who first contacts the vendor to request a refund and confirm the amount. DHS will send the vendor up to three dunning letters requesting payment of the funds. If the vendor fails to respond after the third notice, the amount of the balance of funds owed to DHS will be deducted from the vendor's next payment(s) until the funds are repaid. The vendor acknowledges that DHS will reduce vendor payments by the amount of the balance of funds owed to allow for the expeditious collection of these debts. If funds are unable to be recouped, outstanding balances will be referred to the Attorney General's Office for collection proceedings and all other legal remedies.

8. Provide all requested information established in DHS policies and procedures. This could include information on the annual heating usage and cost incurred by LIHEAP households necessary for compliance with federal reporting requirements if this information is gathered by customer name or account number and the customer has been served by the vendor at the same address for the entire annual period.
9. Vendors are holding, on DHS' behalf, federal money for the benefit of recipient customers. Vendors are prohibited from using LIHEAP funds for purposes other than home heating. This requirement does not supersede the provisions of the Federal Bankruptcy Act, 11 U.S.C., Section 366.
10. To promptly notify the LIHEAP Vendor Unit whenever discrepancies in approved applications are found. Examples include a vacant residence, a request for service at an address other than what was indicated on the Remittance Advice (payment voucher) or other situations when the vendor is aware of potentially fraudulent activity.
11. To not discriminate against any eligible household in regard to terms and conditions of sale, credit, service or price, nor treat adversely any household receiving LIHEAP because of such assistance.
12. To ensure the retention of LIHEAP customer confidentiality in the use of social media.
13. To notify DHS at least 120 days before filing for bankruptcy and return all funds not expended on LIHEAP clients at least 91 days before filing for bankruptcy.
14. To resolve crisis payment disputes with DHS' Bureau of Hearings and Appeals if not resolved informally with DHS staff.
15. To present for review or reproduction records maintained by the vendor concerning overall pricing, conditions of sale, credit, and service upon request by DHS for audit or investigation purposes, as provided in this agreement.
16. If DHS receives a notice of levy, DHS will turn over rights to property such as money, credit and deposits in accordance to the notice.
17. Vendors will retain all books, records and documents pertaining to LIHEAP payments **for four years from the receipt of payment** or until all questioned costs or activities have been resolved to the satisfaction of the commonwealth, or as required by applicable federal laws and regulations. All records must be maintained in a legible, readable condition. If records are maintained in a computer, the vendor must cooperate in providing printed versions of such records. Recipient-specific records should clearly identify both Cash and Crisis payments from LIHEAP, charges to the account, and documentation supporting these entries by individual household.

The commonwealth reserves the right for state and federal agencies or their authorized representatives to perform financial and compliance audits if deemed necessary by commonwealth or federal agencies. If an audit of this agreement will be performed, the vendor will be given 60 days advance notice.

A new LIHEAP Vendor Agreement is required every two years unless changes require this time frame to be shortened. **This agreement will terminate June 30, 2021, unless superseded by a new agreement, or terminated for convenience upon 30-day written notice by either DHS or by the vendor. Failure to comply with any of these conditions may result in removal from the approved vendor file and suspension of further payments to the vendor for client services.**

LIHEAP VENDOR HELPLINE
Toll Free Number 1-877-537-9517
Fax 717-231-5516
Email Address: RA-LIHEAPVendors@pa.gov

LIHEAP VENDOR WEBSITE
www.dhs.pa.gov/provider/informationforliheapvendors/index.htm

**CAUSE-PA STATEMENT 1
APPENDIX A
RESUME OF HARRY S. GELLER**

RESUME OF HARRY S. GELLER

EDUCATIONAL BACKGROUND:

Harpur College, State University of New York at Binghamton, B.A. 1966

Washington College of Law, American University, J.D. 1969

New York University Law School, courses in Urban Affairs and Poverty Law, as part of
Volunteers in Service to America (VISTA) Program 1969-1971

EMPLOYMENT:

1988 – 2015 Executive Director, Pennsylvania Utility Law Project (PULP), a project of the civil non-profit Pennsylvania Legal Aid Network. PULP is dedicated to providing technical support, information sharing, and representation to low-income individuals and organizations, assisting and advocating for the low income in utility and energy matters. Responsibilities include project oversight, case consultation, co-counseling, and participation on task forces, work groups and advisory panels, community education and training in utility and energy matters affecting the low-income.

While at PULP, served in the following capacities:

- Chairman, Low-Income Home Energy Assistance Program (LIHEAP) Advisory Committee to the Secretary, Pennsylvania Department of Human Services
- Member, Pennsylvania Public Utility Commission, Consumer Advisory Council
- Coordinator, Pennsylvania Legal Services Utility/Energy Work Groups
- Member, Weatherization Policy Advisory Committee to the Department of Community and Economic Development
- Member, PECO Universal Service Advisory Committee and LIURP Subcommittee

1974-1987 Staff Attorney, Managing Attorney and ultimately, Executive Director of Legal Services, Incorporated (LSI), a civil legal services program serving Adams, Cumberland, Franklin and Fulton Counties. Through a restructuring with other legal services programs, LSI became part of what is now known as MidPenn Legal Services and Franklin County Legal Services.

1971-1972 Staff Attorney, New York City Legal Aid Society, Criminal Court and Supreme Court Branches, New York County.

1969-1971 Volunteer in Service to America (VISTA) assigned to the New York University Law School Project on Urban Affairs and Poverty Law.

BAR ADMISSIONS

New York State

Commonwealth of Pennsylvania

United States District Court, Middle District of Pennsylvania

Cases in which Harry S. Geller has participated as a witness before the Pennsylvania Public Utility Commission since July 1, 2015

- Pennsylvania Public Utility Commission v. Philadelphia Gas Works, R-2020-3017206
- Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program for the Period of June 1, 2021 through May 31, 2025, Docket No. P-2020-3019356.
- Petition of PECO Energy Company for Approval of Its Default Service Program for the Period from June 1, 2021 through May 31, 2025, Docket No. P-2020-3019290.
- Petition of Duquesne Light Company For Approval of Default Service Plan For The Period June 1, 2021 Through May 31, 2025, Docket No. P-2020-3019522.
- Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC and Peoples Gas Company LLC for all of the Authority and Necessary Certificates of Public Convenience to Approve a Change in Control of Peoples Natural Gas Company LLC, and Peoples Gas Company LLC by way of the Purchase of all of LDC Funding LLC's Membership Interests by Aqua America, Inc., Docket Nos. A-2018-3006061, A-2018-3006062, A-2018-3006063.
- Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc. et al. Docket Nos. R-2018-3003558 et seq.
- Pennsylvania Public Utility Commission v. Duquesne Light Company, Docket No. R-2018-3000124.
- Pennsylvania Public Utility Commission v. PECO Energy Company- Electric Division, Docket No. R-2018-3000164.
- Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company for Approval of their Default Service Programs for the period commencing June 1, 2019 through May 31, 2023, Docket Nos. P-2017-2637855, P-2017-2637857, P-2017-2637858; P-2017-2637866.
- Pennsylvania Public Utility Commission et al. v. Philadelphia Gas Works, Docket No. R-2017-2586783.
- PECO Energy Company's Pilot Plan for an Advance Payments Program and Petition for Temporary Waiver of Portions of the Commission's Regulations with Respect to that Plan, Docket No. P-2016-2573023.
- Petition of PECO Energy Company for Approval of a Default Service Program for the Period of June 1, 2017 through May 31, 2019, Docket No. P-2016-2534980.
- Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program and Procurement Plan for the Period of June 1, 2017 through May 31, 2021, Docket No. P-2016-2526627.
- Petition of Duquesne Light Company for Approval of a Default Service Program for the Period of June 1, 2017 through May 31, 2021, Docket No. P-2016-2543140.
- Pennsylvania Public Utility Commission et al. v. Columbia Gas of Pennsylvania, Inc., Docket No. R-2016-2529660.
- Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company for Approval of their Default Service Programs for the period commencing June 1, 2017 through May 31, 2019, Docket Nos. P-2015-2511333, P-2015-25113351, P-2015-2511355; P-2015-2511356.
- Petition of PPL Electric Utilities Corporation for Approval of its Energy Efficiency and Conservation Plan, Docket No. M-2015-2515642.

**CAUSE-PA STATEMENT 1
APPENDIX B
CITED RESPONSES TO INTERROGATORIES**

**Appendix B
Cited Responses to Interrogatories**

Interrogatories of the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania to Duquesne Light Company

CAUSE-PA to Duquesne I-1 - Revised
CAUSE-PA to Duquesne I-2 - Revised
CAUSE-PA to Duquesne I-3
CAUSE-PA to Duquesne I-6
CAUSE-PA to Duquesne I-7 - Revised
CAUSE-PA to Duquesne I-8
CAUSE-PA to Duquesne I-9
CAUSE-PA to Duquesne I-10
CAUSE-PA to Duquesne I-11
CAUSE-PA to Duquesne I-12
CAUSE-PA to Duquesne I-14
CAUSE-PA to Duquesne I-15a, I-15b
CAUSE-PA to Duquesne I-19

Interrogatories of the Office of Consumer Advocate to Duquesne Light Company

OCA to Duquesne I-13
OCA to Duquesne I-16
OCA to Duquesne I-20
OCA to Duquesne II-11

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: David B. Ogden

CAUSE-PA Set I-1

1. In a live Excel spreadsheet, please provide the following for January 2015 to date, disaggregated by month and by year:
 - (a) The total number of residential customers.
 - (b) The total number of residential shopping customers.
 - (c) The total usage of residential shopping customers.
 - (d) The total amount billed for generation supply charges for residential, shopping customers.
 - (e) The total number of residential non-shopping customers.
 - (f) The total usage of residential, non-shopping customers.
 - (g) The total amount billed for generation supply charges for residential non-shopping customers.
 - (h) The applicable price to compare.

Response:

Please see CAUSE PA Set I-1a-h.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-1 - Page 1
Residential Customer Count

Residential	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	512,804	533,287	534,291	533,433	534,408	535,838	534,489	540,163	534,934	535,725	535,145	535,221
Residential	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	536,997	537,773	538,591	538,716	539,057	538,081	540,423	544,041	539,809	540,611	541,437	540,774
Residential	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	541,797	542,536	542,817	541,873	541,049	540,913	541,788	545,756	542,275	541,458	540,623	541,939
Residential	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	542,600	542,907	543,183	542,133	540,273							

[1] Residential customer counts reflect the number of bills that were generated each month. Based on the number of bill cycles in a given month, the number of generated bills could fluctuate month over month. The number of bills generated also reflect a slight inflation for customers that switched mid-month.

[2] Residential customers who received dual bills in a given month have been excluded from this response. Dual billing permits an EGS that does not wish to operate in either a rate ready or bill ready environment to render its own bill.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-1 - Page 2
Residential Switching Customer Count

Residential	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	158,845	164,388	164,234	163,381	163,133	162,488	161,577	161,797	160,869	160,847	160,532	161,231
Residential	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	161,672	161,272	161,104	161,325	161,401	161,617	162,533	162,726	161,645	162,110	162,577	162,029
Residential	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	161,788	161,590	161,209	159,572	157,996	156,870	156,641	156,017	154,080	152,964	151,923	151,725
Residential	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	151,875	151,985	151,686	150,772	149,598							

[1] Residential customer counts reflect the number of bills that were generated each month. Based on the number of bill cycles in a given month, the number of generated bills could fluctuate month over month. The number of bills generated also reflect a slight inflation for customers that switched mid-month.

[2] Residential customers who received dual bills in a given month have been excluded from this response. Dual billing permits an EGS that does not wish to operate in either a rate ready or bill ready environment to render its own bill.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-1 - Page 3
Residential Switching kWh

Residential	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	120,588,155	103,134,132	93,792,921	87,299,261	80,135,904	98,388,546	133,507,232	139,161,836	108,206,087	97,159,120	84,742,093	101,203,185
Residential	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	135,146,552	108,244,386	92,958,535	94,014,558	81,694,100	115,969,709	145,595,505	145,479,629	144,104,990	102,756,638	89,944,966	104,164,351
Residential	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	112,617,393	111,704,900	97,223,088	80,440,515	74,513,398	91,353,607	130,542,289	145,429,776	116,892,397	92,948,949	75,383,236	93,006,825
Residential	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	101,925,422	90,267,394	84,539,358	83,018,744	77,870,542							

[1] Residential customers who received dual bills in a given month have been excluded from this response. Dual billing permits an EGS that does not wish to operate in either a rate ready or bill ready environment to render its own bill.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-1 - Page 4
Residential Switching Transmission & Generation Charges

Residential	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	\$11,020,949	\$9,494,760	\$8,634,041	\$8,066,564	\$7,474,482	\$9,216,650	\$12,637,140	\$13,267,437	\$10,376,300	\$9,392,930	\$8,223,327	\$9,901,886
Residential	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	\$13,141,882	\$10,667,352	\$9,167,248	\$8,996,791	\$8,107,750	\$11,625,179	\$14,597,234	\$14,545,212	\$14,233,194	\$10,259,520	\$9,082,455	\$10,508,391
Residential	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	\$11,620,747	\$11,593,385	\$10,178,001	\$8,466,588	\$7,907,116	\$9,626,810	\$13,591,705	\$15,004,138	\$11,942,565	\$9,509,330	\$7,805,913	\$9,632,230
Residential	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	\$10,429,139	\$9,260,125	\$8,728,660	\$8,588,183	\$8,044,583							

[1] Residential shopping transmission and generation charges reflect both rate ready and bill ready EGSs. Rate ready is a form of consolidated billing where the Company calculates the charges to be presented on the supplier portion of the bill based upon the rates supplied by the EGS. Bill ready is also a form of consolidated billing where the Company provides a customer's usage to its EGS, and the EGS then calculates the customer's charges and sends the line item(s) back to the Company to be presented on the supplier portion of the bill. The Company does not have visibility in the EGS bill ready charges, which could include prior period adjustments, non-basic service charges, etc.

[2] Residential customers who received dual bills in a given month have been excluded from this response. Dual billing permits an EGS that does not wish to operate in either a rate ready or bill ready environment to render its own bill.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-1 - Page 5
Residential POLR Customer Count

Residential	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	353,959	368,899	370,057	370,052	371,275	373,350	372,912	378,366	374,065	374,878	374,613	373,990
Residential	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	375,325	376,501	377,487	377,391	377,656	376,464	377,890	381,315	378,164	378,501	378,860	378,745
Residential	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	380,009	380,946	381,608	382,301	383,053	384,043	385,147	389,739	388,195	388,494	388,700	390,214
Residential	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	390,725	390,922	391,497	391,361	390,675							

[1] Residential customer counts reflect the number of bills that were generated each month. Based on the number of bill cycles in a given month, the number of generated bills could fluctuate month over month. The number of bills generated also reflect a slight inflation for customers that switched mid-month.

Duquesne Light Company
 Default Service Plan June 1, 2021 to May 31, 2025
 Attachment CAUSE I-1 - Page 6
 Residential POLR kWh

Residential	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	249,792,046	219,255,483	198,290,227	182,480,884	163,039,549	200,129,125	269,932,501	285,151,781	224,242,437	203,168,292	180,347,584	220,949,935
Residential	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	300,246,164	245,715,610	209,573,849	210,061,926	176,951,936	241,359,445	300,494,619	303,258,430	301,456,612	216,558,727	194,959,860	231,254,568
Residential	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	253,015,191	259,711,424	228,060,188	186,241,262	168,772,130	206,778,999	292,811,817	329,755,592	272,604,583	221,204,433	183,257,447	233,384,725
Residential	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	254,791,786	231,604,441	216,588,158	207,253,572	193,914,174							

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-1 - Page 7
Residential POLR Transmission & Generation Charges

Residential	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	\$19,140,853	\$16,788,835	\$15,229,493	\$14,020,175	\$12,610,287	\$15,487,858	\$20,925,658	\$22,287,106	\$17,373,042	\$15,810,928	\$13,930,833	\$17,020,946
Residential	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	\$23,131,635	\$19,053,236	\$16,207,769	\$16,235,433	\$13,731,701	\$18,900,979	\$23,744,436	\$23,969,837	\$23,837,720	\$16,760,529	\$14,429,556	\$16,965,004
Residential	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	\$18,462,340	\$18,884,674	\$16,596,705	\$13,563,984	\$12,442,900	\$15,224,526	\$21,549,278	\$24,278,235	\$20,071,833	\$16,265,934	\$13,414,149	\$16,746,105
Residential	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	\$17,790,222	\$16,117,373	\$15,097,595	\$14,496,325	\$13,580,695							

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-1 - Page 8
Residential PTCs (cents/kWh)

	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
RS	7.83	7.83	7.83	7.83	7.83	7.79	7.79	7.79	7.79	7.79	7.79	7.83
RH	6.80	6.80	6.80	6.80	6.80	7.16	7.16	7.16	7.16	7.16	7.16	7.20
RA	7.54	7.54	7.54	7.54	7.54	7.65	7.65	7.65	7.65	7.65	7.65	7.69
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
RS	7.83	7.83	7.83	7.83	7.83	7.96	7.96	7.96	7.96	7.51	7.51	7.45
RH	7.20	7.20	7.20	7.20	7.20	7.04	7.04	7.04	7.04	6.59	6.59	6.53
RA	7.69	7.69	7.69	7.69	7.69	7.55	7.55	7.55	7.55	7.10	7.10	7.04
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
RS	7.45	7.45	7.45	7.45	7.45	7.41	7.41	7.41	7.41	7.41	7.41	7.10
RH	6.53	6.53	6.53	6.53	6.53	6.61	6.61	6.61	6.61	6.61	6.61	6.30
RA	7.04	7.04	7.04	7.04	7.04	7.17	7.17	7.17	7.17	7.17	7.17	6.86
	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
RS	7.10	7.10	7.10	7.10	7.10							
RH	6.30	6.30	6.30	6.30	6.30							
RA	6.86	6.86	6.86	6.86	6.86							

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

CAUSE-PA Set I-2

2. In a live Excel spreadsheet, please provide the following for January 2015 to date, disaggregated by month and by year:
- (a) The total number of confirmed low income (CLI) customers who are not enrolled in CAP.
 - (b) The total number of residential, non-CAP CLI shopping customers.
 - (c) The total usage of residential, non-CAP CLI shopping customers.
 - (d) The total amount billed for generation supply charges for residential, non-CAP CLI shopping customers.
 - (e) The total number of residential, non-CAP, non-shopping CLI customers.
 - (f) The total usage of residential, non-CAP, non-shopping CLI customers.
 - (g) The total amount billed for generation supply charges for residential non-CAP non-shopping CLI customers.

Response:

I understand that, based on discussions between counsel for the Company and CAUSE-PA, this question has been revised to request data for the period January 2017 to date.

Please see CAUSE-PA Set I-2a.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-2 - Page 1
Residential Non-CAP CLI Customer Count

Residential CLI	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	7,205	8,091	8,374	8,634	8,823	10,903	14,379	15,267	14,099	16,308	15,102	14,873
Residential CLI	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	15,467	15,642	15,818	15,594	15,775	15,497	14,880	14,582	14,154	14,109	14,081	13,817
Residential CLI	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	13,905	13,827	13,853	14,023	13,734	13,312	11,997	11,745	11,207	11,222	11,361	11,684
Residential CLI	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	11,999	11,955	11,922	11,660	11,373							

[1] Residential customer counts reflect the number of bills that were generated each month. Based on the number of bill cycles in a given month, the number of generated bills could fluctuate month over month. The number of bills generated also reflect a slight inflation for customers that switched mid-month.

[2] Residential customers who received dual bills in a given month have been excluded from this response. EGSs that participate in dual billing render a separate bill, to which the Company does not have access, for electric supply.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-2 - Page 2
Residential Non-CAP CLI Switching Customer Count

Residential CLI	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	1,028	1,049	1,092	1,148	1,121	1,108	1,124	1,164	1,278	1,347	1,452	1,580
Residential CLI	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	1,715	1,777	1,906	2,047	2,165	2,232	2,304	2,476	2,540	2,656	2,731	2,723
Residential CLI	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	2,764	2,819	2,843	2,856	2,687	2,472	2,184	2,084	1,874	1,784	1,734	1,769
Residential CLI	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	1,789	1,802	1,823	1,847	1,830							

[1] Residential customer counts reflect the number of bills that were generated each month. Based on the number of bill cycles in a given month, the number of generated bills could fluctuate month over month. The number of bills generated also reflect a slight inflation for customers that switched mid-month.

[2] Residential customers who received dual bills in a given month have been excluded from this response. EGSs that participate in dual billing render a separate bill, to which the Company does not have access, for electric supply.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-2 - Page 3
Residential Non-CAP CLI Switching kWh

Residential CLI	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	855,307	736,630	692,003	644,284	520,239	594,603	753,365	810,504	729,801	714,632	756,715	1,045,302
Residential CLI	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	1,560,846	1,323,407	1,216,207	1,316,575	1,081,365	1,358,422	1,750,130	1,890,873	1,954,602	1,527,377	1,587,326	1,979,687
Residential CLI	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	2,120,015	2,237,300	1,993,332	1,611,258	1,246,767	1,269,705	1,488,795	1,606,411	1,188,557	925,332	852,598	1,112,702
Residential CLI	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	1,215,257	1,119,859	1,065,220	1,039,914	976,648							

[1] Residential customers who received dual bills in a given month have been excluded from this response. EGSs that participate in dual billing render a separate bill, to which the Company does not have access, for electric supply.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-2 - Page 4
Residential Non-CAP CLI Switching Transmission & Generation Charges

Residential CLI	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	\$76,770	\$68,542	\$63,200	\$58,958	\$48,843	\$55,015	\$70,545	\$76,918	\$69,500	\$67,004	\$71,127	\$98,421
Residential CLI	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	\$144,950	\$122,409	\$112,213	\$111,414	\$99,169	\$124,823	\$158,704	\$171,432	\$177,143	\$142,142	\$152,768	\$196,165
Residential CLI	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	\$219,666	\$235,610	\$212,205	\$170,649	\$134,551	\$135,149	\$157,261	\$165,326	\$121,733	\$95,062	\$88,678	\$115,057
Residential CLI	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	\$124,541	\$113,675	\$111,138	\$108,551	\$100,104							

[1] Residential shopping transmission and generation charges reflect both rate ready and bill ready EGSs. Rate ready is a form of consolidated billing where the Company calculates the charges to be presented on the supplier portion of the bill based upon the rates supplied by the EGS. Bill ready is also a form of consolidated billing where the Company provides a customer's usage to its EGS, and the EGS then calculates the customer's charges and sends the line item(s) back to the Company to be presented on the supplier portion of the bill. The Company does not have visibility in the EGS bill ready charges, which could include prior period adjustments, non-basic service charges, etc.

[2] Residential customers who received dual bills in a given month have been excluded from this response. EGSs that participate in dual billing render a separate bill, to which the Company does not have access, for electric supply.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-2 - Page 5
Residential Non-CAP CLI POLR Customer Count

Residential CLI	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	6,177	7,042	7,282	7,486	7,702	9,795	13,255	14,103	12,821	14,961	13,650	13,293
Residential CLI	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	13,752	13,865	13,912	13,547	13,610	13,265	12,576	12,106	11,614	11,453	11,350	11,094
Residential CLI	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	11,141	11,008	11,010	11,167	11,047	10,840	9,813	9,661	9,333	9,438	9,627	9,915
Residential CLI	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	10,210	10,153	10,099	9,813	9,543							

[1] Residential customer counts reflect the number of bills that were generated each month. Based on the number of bill cycles in a given month, the number of generated bills could fluctuate month over month. The number of bills generated also reflect a slight inflation for customers that switched mid-month.

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-2 - Page 6
Residential Non-CAP CLI POLR kWh

Residential CLI	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	5,141,549	4,972,828	4,683,217	4,289,573	3,582,854	5,369,052	9,026,401	10,103,907	7,831,354	8,005,142	7,488,322	9,492,569
Residential CLI	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	13,296,545	11,119,022	9,505,346	9,184,902	7,296,069	8,756,739	10,229,299	10,037,131	9,457,209	6,966,253	6,749,562	8,133,684
Residential CLI	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	8,989,997	9,184,613	8,189,385	6,548,555	5,377,910	5,993,479	7,314,570	8,188,846	6,649,951	5,587,259	5,232,319	7,104,045
Residential CLI	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	7,980,744	7,299,825	6,831,654	6,143,930	5,503,087							

Duquesne Light Company
Default Service Plan June 1, 2021 to May 31, 2025
Attachment CAUSE I-2 - Page 7

Residential Non-CAP CLI POLR Transmission & Generation Charges

Residential CLI	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
	\$381,331	\$376,900	\$348,232	\$317,843	\$270,367	\$415,682	\$689,955	\$868,218	\$624,761	\$662,670	\$587,073	\$728,696
Residential CLI	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
	\$1,021,740	\$868,953	\$730,872	\$710,989	\$568,194	\$686,629	\$809,348	\$794,774	\$747,009	\$540,188	\$500,582	\$596,259
Residential CLI	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
	\$654,607	\$665,858	\$594,046	\$475,545	\$396,531	\$441,832	\$537,538	\$602,505	\$489,481	\$410,848	\$382,255	\$508,515
Residential CLI	Jan-20	Feb-20	Mar-20	Apr-20	May-20							
	\$556,291	\$505,628	\$473,974	\$427,352	\$384,076							

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

CAUSE-PA Set I-3

3. Please explain how Duquesne defines the term “confirmed low income customers”, identify the criteria to be considered a confirmed low income customer, and indicate the length of time that a customer retains the designation.

Response:

The Company currently defines a confirmed low-income customer as:

1. Active CAP **OR**
2. Removed from CAP within the last two years **OR**
3. Received LIHEAP (cash or crisis) or Dollar Energy Fund within the last two years **OR**
4. Smart Comfort (LIURP) visit that occurred in the last 2 years and household income no greater than 150% of FPI (0-150% federal poverty indicator) customer at the time of the visit.

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

CAUSE-PA Set I-6

6. Please explain how the Company defines the term "payment troubled."

Response:

The Company defines a payment-troubled household as: "A household that has failed to maintain one or more payment agreements in a 1-year period."

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: David B. Ogden

CAUSE-PA Set I-7

7. From 2015 to date in 2020, disaggregated by year and by month, please provide a chart comparing the actual billed supplier charges for each customer class with the amount that would have been charged for each customer class if those same customers had received service at the applicable price to compare. Please provide this data in a live Excel spreadsheet.

Response:

I understand that, based on discussions between counsel for the Company and CAUSE-PA, this question has been revised to request data for residential rate classes only for the period January 2017 to date.

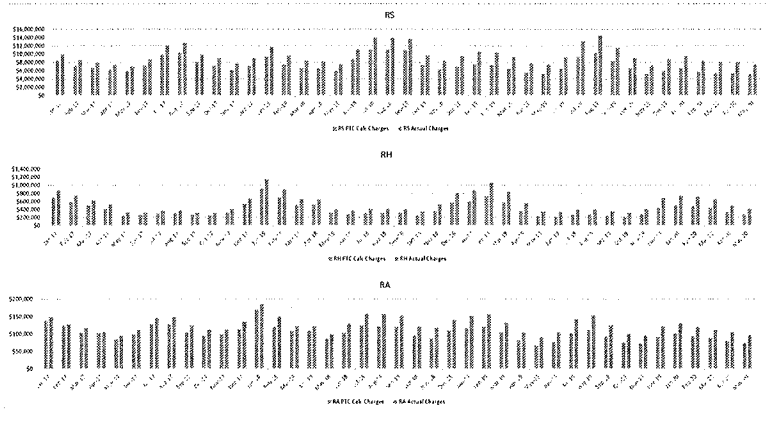
Please see CAUSE PA Set I-7a.

As agreed upon, this response is limited to the residential rate classes from 2017 to date in 2020. We further interpreted this question to only include EGS supplier charges since the question appears to be looking for the customer impact had they received service at the applicable price to compare. As requested, charts have been provided that compare:

1. The actual billed EGS supplier charges that are sourced in total from our response to CAUSE-PA Set I-1.
2. The theoretical charges for each residential customer class had the same customers received service at the applicable price to compare.

Duquesne Light Company
 District Service Plan June 1, 2021 to May 31, 2025
 Attachment CAUSE 1.7
 Actual Residential Switching Transmission & Generation Charges vs. Illustrative PTC Calculated Charges

	(I)	(II)	(III)	(IV)	(V)
	RS PTC Calc Charges	RS Actual Charges	RH PTC Calc Charges	RH Actual Charges	RA PTC Calc Charges
Jan-17	\$8,491,255	\$9,991,375	\$700,037	\$583,769	\$139,096
Feb-17	\$7,270,481	\$8,624,808	\$586,276	\$764,839	\$126,136
Mar-17	\$6,846,210	\$7,493,453	\$436,372	\$613,579	\$103,237
Apr-17	\$6,257,429	\$7,453,791	\$405,205	\$512,812	\$102,958
May-17	\$5,956,613	\$7,004,580	\$255,910	\$285,370	\$85,665
Jun-17	\$7,279,013	\$8,783,282	\$282,453	\$331,164	\$59,403
Jul-17	\$9,942,300	\$12,127,657	\$299,940	\$373,448	\$178,335
Aug-17	\$10,378,079	\$12,737,620	\$355,122	\$383,492	\$146,324
Sep-17	\$8,038,896	\$9,927,576	\$261,202	\$324,242	\$104,462
Oct-17	\$7,200,806	\$8,965,284	\$280,270	\$315,863	\$86,662
Nov-17	\$6,148,331	\$7,700,205	\$335,000	\$410,054	\$97,890
Dec-17	\$7,278,069	\$9,009,282	\$853,422	\$675,910	\$118,618
Jan-18	\$9,186,074	\$11,612,127	\$912,078	\$1,146,212	\$169,678
Feb-18	\$7,595,129	\$9,675,191	\$596,308	\$392,650	\$149,500
Mar-18	\$6,510,386	\$8,393,212	\$312,458	\$523,107	\$107,007
Apr-18	\$6,884,333	\$8,226,314	\$520,594	\$618,811	\$111,445
May-18	\$5,952,649	\$7,601,021	\$322,217	\$407,430	\$86,256
Jun-18	\$8,606,618	\$11,318,137	\$218,863	\$383,761	\$102,993
Jul-18	\$11,102,876	\$14,023,132	\$314,492	\$416,546	\$124,192
Aug-18	\$11,094,210	\$13,971,345	\$319,846	\$416,309	\$122,192
Sep-18	\$10,983,818	\$13,677,814	\$316,300	\$412,076	\$120,775
Oct-18	\$7,333,293	\$9,793,207	\$282,659	\$344,079	\$85,670
Nov-18	\$6,250,074	\$8,465,259	\$361,121	\$393,164	\$87,400
Dec-18	\$6,599,573	\$8,560,484	\$665,635	\$607,656	\$108,998
Jan-19	\$7,547,728	\$10,592,436	\$594,022	\$875,582	\$117,720
Feb-19	\$7,361,313	\$10,378,490	\$790,847	\$1,064,628	\$130,218
Mar-19	\$6,477,846	\$9,201,864	\$574,178	\$841,054	\$106,136
Apr-19	\$5,491,602	\$7,811,231	\$363,824	\$349,991	\$81,117
May-19	\$5,137,400	\$7,472,249	\$230,556	\$346,046	\$66,637
Jun-19	\$6,443,816	\$8,196,310	\$319,873	\$326,028	\$76,637
Jul-19	\$9,273,059	\$13,050,702	\$185,796	\$288,925	\$101,565
Aug-19	\$10,344,502	\$14,441,832	\$281,729	\$408,879	\$111,607
Sep-19	\$8,293,232	\$11,461,162	\$344,496	\$355,111	\$92,367
Oct-19	\$6,548,073	\$9,008,184	\$215,268	\$311,871	\$76,607
Nov-19	\$5,182,287	\$7,301,090	\$284,165	\$410,182	\$72,575
Dec-19	\$6,006,382	\$8,881,179	\$445,407	\$678,399	\$102,114
Jan-20	\$6,374,162	\$9,262,185	\$450,335	\$718,781	\$100,574
Feb-20	\$5,773,667	\$8,426,633	\$478,072	\$731,783	\$99,670
Mar-20	\$5,212,212	\$7,370,951	\$436,049	\$645,519	\$87,710
Apr-20	\$5,441,787	\$7,992,902	\$318,035	\$490,790	\$80,252
May-20	\$5,339,064	\$7,528,725	\$278,335	\$419,510	\$75,495



The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

CAUSE-PA Set I-8

8. In a live Excel spreadsheet, please provide the number of confirmed low income shopping customers, broken down by zip code, for each year since 2015.

Response:

Please see CAUSE-PA I-8a.

Duquesne Light Company

CAUSE PA I-8

Number of Confirmed Low Income Switching Customers, Broken down by Zip Code, for each year since 2015.

#CLI_Switching_Customer s	Year				
	2015	2016	2017	2018	2019
15001	27	40	47	93	55
15003	16	23	32	62	28
15005	7	10	9	12	8
15009	5	11	10	18	12
15010	20	35	49	65	41
15017			1		
15024	1	1		3	2
15025	11	13	30	50	33
15026	2	2	2	2	2
15027	4	1	2	2	2
15034	1	3	4	5	4
15035	5	4	8	8	6
15042	6	4	3	8	3
15043	2			6	6
15044	4	10	9	12	5
15045	5	6	9	15	16
15046	2	2	4	4	1
15050	1		3	3	
15051				1	1
15052	2		1	3	4
15056	1	2	2	1	3
15059	4	7	9	20	9
15061	6	13	13	31	18
15066	11	14	25	59	30
15068	1	1	2	1	2
15071	2				
15074	17	15	19	41	23
15081	1	1	1	3	
15084				1	
15085	6	6	2	8	8
15101	8	8	11	14	10
15102					2
15104	19	27	40	55	51
15106	16	21	21	28	15
15108	12	11	26	38	21
15110	6	20	28	49	35
15112	1	5	8	16	18
15116	2	2	1	9	7
15120	22	40	36	61	41
15122	10	23	34	54	33
15126	2	2	2	5	2
15131	1	2	3	11	3
15132	25	32	64	92	51
15133	6	6	6	8	12

15136	28	38	60	93	54
15137	12	5	17	28	20
15139	3	2	3	5	9
15143	5	6	4	9	5
15145	13	10	26	34	21
15146	11	26	25	43	20
15147	20	22	30	45	40
15148	4	8	12	14	9
15201	11	14	14	18	14
15202	16	11	27	53	28
15203	1	4	3	15	8
15204	12	22	38	45	29
15205	9	18	27	40	21
15206	18	36	45	107	72
15207	15	28	37	39	29
15208	20	21	23	54	41
15209	6	11	13	30	12
15210	41	61	109	157	102
15211	13	8	11	24	21
15212	25	25	47	105	74
15213	9	6	7	20	19
15214	9	14	25	40	25
15215	5	4	10	17	19
15216	13	17	27	37	26
15217	5	4	6	13	7
15218	14	13	17	29	27
15219	22	27	40	76	50
15220	7	6	12	23	16
15221	36	62	83	132	90
15222		1			
15223	5	7	16	26	25
15224	8	11	20	29	16
15225	2		1	3	
15226	14	14	11	19	11
15227	19	26	31	61	39
15228	7	6	6	10	5
15229	1	7	9	21	8
15232		2	2	3	1
15233	2	5	3	18	9
15234	5	7	10	14	12
15235	30	46	59	89	56
15236	11	8	6	24	15
15237	3	7	8	19	11
15238		2	4	3	2
15239	9	11	17	21	16
15243	3	2	2	6	2
16115			1		
Grand Total	822	1114	1580	2688	1759

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

CAUSE-PA Set I-9

9. In a live Excel spreadsheet, please provide the number of residential shopping customers, broken down by zip code, for each year since 2015.

Response:

Please see CAUSE-PA I-9a.

Duquesne Light Company

CAUSE-PA I-9

Number of Residential Switching Customers, Broken Down by Zip Code, for each year since 2015

#Residential_Switching_Customer:Year					
Zip Code	2015	2016	2017	2018	2019
15001	4,766	4,827	4,548	4,573	4,261
15003	1,691	1,667	1,608	1,658	1,466
15005	1,455	1,460	1,375	1,365	1,222
15006	62	62	62	62	54
15007	59	59	56	52	47
15009	2,264	2,408	2,264	2,251	2,064
15010	1,802	1,881	1,762	1,799	1,677
15017	193	183	163	162	153
15021	5	4	2	3	3
15024	489	484	452	442	407
15025	1,399	1,329	1,303	1,287	1,153
15026	489	506	491	507	474
15027	319	318	309	320	277
15034	325	305	288	271	245
15035	370	344	319	322	293
15037	24	29	27	21	18
15042	1,292	1,339	1,222	1,199	1,083
15043	346	350	335	326	297
15044	4,088	4,121	3,911	3,718	3,478
15045	720	646	628	603	522
15046	413	405	372	364	328
15050	390	411	387	392	359
15051	68	71	68	71	61
15052	558	568	518	527	485
15056	154	143	132	150	146
15059	671	660	617	635	559
15061	1,729	1,784	1,679	1,752	1,598
15062	1				1
15066	1,589	1,557	1,481	1,576	1,386
15068	615	605	575	603	567
15071	247	250	251	234	215
15074	1,261	1,257	1,164	1,204	1,072
15075	39	32	27	33	26
15077	10	8	8	15	11
15081	56	51	52	47	39
15084	50	49	48	46	45
15085	604	599	551	555	502
15090	4	8	11	16	23
15091	12	10	9	10	9
15101	4,272	4,233	4,033	3,838	3,647
15102	505	521	461	435	422

15104	917	869	871	933	925
15106	3,216	3,149	3,113	3,069	2,826
15108	5,606	5,529	5,528	5,367	4,994
15110	534	561	563	580	529
15112	463	447	454	459	434
15116	2,605	2,595	2,426	2,380	2,264
15120	2,938	2,980	2,904	2,863	2,681
15122	2,968	2,909	2,806	2,748	2,549
15126	415	410	424	407	362
15131	1,381	1,346	1,268	1,190	1,069
15132	2,545	2,408	2,385	2,296	2,046
15133	1,134	1,094	1,010	958	917
15134	1	1	1	1	1
15136	3,108	2,983	2,849	2,862	2,760
15137	1,550	1,504	1,459	1,479	1,340
15139	1,087	1,028	946	946	915
15140	4	3	3	4	3
15142	288	281	271	274	256
15143	2,271	2,272	2,117	2,120	2,034
15145	1,220	1,156	1,131	1,066	1,006
15146	4,462	4,526	4,362	4,291	3,967
15147	3,064	2,958	2,897	2,828	2,734
15148	382	337	335	354	291
15201	1,826	1,875	1,880	1,846	1,750
15202	2,749	2,651	2,663	2,895	2,746
15203	1,439	1,325	1,297	1,455	1,481
15204	1,033	996	1,005	999	932
15205	3,323	3,233	3,202	3,258	3,166
15206	3,432	3,324	3,419	3,617	3,517
15207	1,709	1,689	1,637	1,564	1,523
15208	1,224	1,177	1,159	1,261	1,169
15209	2,136	2,044	1,930	1,945	1,855
15210	3,162	2,970	3,021	3,063	2,946
15211	1,668	1,580	1,656	1,621	1,555
15212	3,597	3,534	3,499	3,708	3,692
15213	2,049	2,012	2,061	2,226	2,094
15214	1,867	1,862	1,804	1,822	1,753
15215	1,919	1,840	1,745	1,830	1,752
15216	3,669	3,479	3,438	3,345	3,203
15217	3,680	3,590	3,639	3,669	3,532
15218	2,096	2,033	2,067	2,038	2,002
15219	1,171	1,139	1,139	1,205	1,029
15220	2,669	2,559	2,446	2,595	2,477
15221	4,634	4,520	4,418	4,390	4,246
15222	392	375	366	418	426
15223	1,262	1,171	1,193	1,244	1,183
15224	1,349	1,285	1,320	1,344	1,268

15225	213	201	206	209	182
15226	2,030	1,953	1,841	1,812	1,713
15227	4,302	4,267	4,152	3,982	3,721
15228	2,352	2,296	2,232	2,210	2,108
15229	2,045	2,095	2,033	2,144	2,034
15232	1,187	1,136	1,185	1,191	1,164
15233	342	332	320	373	354
15234	2,311	2,255	2,165	2,058	1,964
15235	6,056	5,891	5,644	5,595	5,202
15236	4,162	4,156	4,054	3,890	3,625
15237	3,838	3,843	3,708	3,690	3,579
15238	1,938	1,895	1,819	1,757	1,670
15239	3,467	3,404	3,315	3,154	2,976
15243	1,967	1,906	1,780	1,741	1,625
15642	23	23	21	21	18
15668	16	15	15	14	10
16059	32	33	31	32	29
16063	55	50	47	49	54
16115	11	12	12	11	9
Grand Total	167,967	164,916	160,276	160,210	150,932

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

CAUSE-PA Set I-10

10. In a live Excel spreadsheet, please provide the number of confirmed low income customer terminations, broken down by zip code, for each year since 2015.

Response:

Please see CAUSE-PA I-10a.

Duquesne Light Company

CAUSE-PA I-10

Number of Confirmed Low Income Customer Terminations, broken down by zip code, for each year since 2015

**Note -- due to the extension of the moratorium resulting from the COVID-19 pandemic, there have been no credit-related residential terminations in 2020*

#CLI_Customer-Term Zip Code	Year				
	2015	2016	2017	2018	2019
15001	28	29	203	282	184
15003	13	11	115	138	132
15005	4	6	14	34	24
15006	1		2		1
15007				1	1
15009	3	1	10	23	17
15010	22	12	104	168	135
15017			2	2	1
15024	2		1	8	4
15025	20	5	110	148	131
15026	5		4	15	15
15027	1		3	9	7
15034	4		4	18	15
15035	2	2	9	20	21
15037	1				
15042	3	3	16	19	15
15043	2	2	3	5	3
15044	7		9	15	16
15045	11	2	35	72	54
15046			7	4	2
15050		1	2	6	2
15051			1	1	
15052	2	1	6	16	6
15056	1	1	4	7	3
15059	7		17	41	22
15061	5	14	55	79	70
15066	16	13	71	109	125
15068		1	3	8	6
15071		1		2	3
15074	8	9	54	89	75
15077		1			1
15081	1	1	5	3	
15085	2	1	10	24	24
15101	2	4	7	21	18
15102			2	6	5
15104	25	12	137	243	188
15106	6	10	38	79	61
15108	13	14	66	100	74
15110	36	3	160	188	174
15112	11	2	44	76	76
15116	2		9	11	5
15120	19	10	125	210	188
15122	12	8	112	158	113
15126	1	3	7	10	4
15131	6	1	22	23	30
15132	42	21	291	410	335
15133	6	1	28	40	35
15136	38	17	154	346	299
15137	16	13	36	109	98
15139	1		10	16	13
15142					1
15143	1	4	5	11	10
15145	12	6	48	106	107
15146	10	11	44	114	103
15147	15	8	79	112	112
15148	7	4	33	63	43
15201	5	2	32	32	33
15202	21	9	64	97	104
15203	2	1	15	35	21
15204	16	7	67	141	110

15205	9	5	53	94	78
15206	27	13	142	228	223
15207	13	7	61	114	117
15208	25	11	119	187	178
15209	6	3	33	62	56
15210	56	15	174	430	372
15211	7	1	11	57	50
15212	36	11	132	304	246
15213	10	4	17	25	39
15214	19	2	43	144	117
15215	8	1	34	53	40
15216	12	4	17	110	108
15217		1	9	14	26
15218	17	7	91	127	98
15219	19	5	57	170	186
15220	6	1	30	62	67
15221	63	36	347	471	439
15222				1	3
15223	7	2	20	37	46
15224	13	6	52	82	64
15225			7	12	7
15226	7	4	7	60	56
15227	9	2	36	121	123
15228		1	1	10	7
15229	1	3	18	43	38
15232			3	4	4
15233	5	1	13	44	24
15234	4	2	15	34	25
15235	43	20	194	261	294
15236	11	5	30	47	33
15237	3	2	3	15	20
15238			3	11	5
15239	4	2	20	38	27
15243				3	5
Grand Total	936	465	4306	7598	6696

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

CAUSE-PA Set I-11

11. In a live Excel spreadsheet, please provide the number of residential customer terminations, broken down by zip code, for each year since 2015.

Response:

Please see CAUSE-PA I-11a.

Duquesne Light Company

CAUSE-PA I-11

Number of Residential Customer Terminations, broken down by zip code, for each year since 2015

**Note -- due to the extension of the moratorium resulting from the COVID-19 pandemic, there have been no credit-related residential terminations in 2020*

#Customer_Terminations	2015	2016	2017	2018	2019
15001	397	615	810	783	650
15003	195	292	489	418	467
15005	67	125	123	113	123
15006	7	2	5	7	3
15007	6	5	7	6	5
15009	119	112	114	198	118
15010	303	270	418	416	459
15017	18	8	14	22	23
15024	37	19	29	30	30
15025	254	91	408	446	447
15026	31	19	31	62	40
15027	24	18	32	32	36
15034	40	16	63	64	66
15035	53	26	55	75	69
15037	6	1	7	4	2
15042	65	118	146	102	115
15043	16	20	14	34	17
15044	162	105	182	163	219
15045	116	57	176	194	218
15046	24	39	53	32	40
15050	20	20	16	39	18
15051	17	5	5	5	12
15052	24	34	37	53	27
15056	23	36	40	33	22
15059	57	55	101	134	119
15061	125	202	260	252	232
15066	152	254	289	298	322
15068	44	18	46	42	45
15071	9	11	11	15	15
15074	130	141	253	263	253
15075	6	6	3	4	12
15077	1	4	6	6	6
15081	10	9	25	16	9
15084	4	2	3	6	5
15085	64	50	39	95	111
15090				2	3
15101	175	110	172	172	198
15102	28	6	41	40	40
15104	296	124	382	516	509
15106	281	223	232	344	386
15108	324	471	561	613	596
15110	229	60	352	334	380
15112	112	57	130	172	207
15116	72	57	105	101	104
15120	429	261	569	663	731
15122	342	186	541	525	478
15126	21	36	42	43	37
15131	107	61	138	135	122
15132	620	287	893	948	910
15133	109	66	164	176	144
15135	1				
15136	341	266	574	809	792
15137	273	182	214	328	332
15139	68	34	114	103	83
15140	1			1	2
15142	17	10	20	22	16
15143	97	181	146	126	156
15145	184	137	236	278	361
15146	358	271	349	537	586
15147	289	191	464	385	468
15148	96	71	112	141	169
15201	210	197	244	213	310

15202	419	269	413	545	581
15203	219	188	198	338	317
15204	174	131	203	349	348
15205	276	198	368	479	486
15206	513	396	690	668	783
15207	208	90	244	334	354
15208	252	141	364	410	416
15209	197	138	201	252	274
15210	615	312	656	1201	1221
15211	187	76	125	331	386
15212	577	381	601	983	994
15213	216	192	204	207	331
15214	239	151	192	401	411
15215	136	116	165	204	228
15216	270	213	181	549	565
15217	186	187	193	244	302
15218	277	196	389	409	416
15219	171	167	226	396	604
15220	207	115	208	303	284
15221	777	605	1207	1158	1310
15222	65	66	72	79	110
15223	140	90	155	181	205
15224	178	144	223	243	278
15225	17	18	39	47	46
15226	118	108	85	301	275
15227	350	155	383	591	626
15228	72	44	64	157	137
15229	154	174	169	200	285
15232	103	101	107	145	138
15233	65	66	66	98	116
15234	124	41	159	228	214
15235	634	401	1010	908	1137
15236	286	167	340	340	338
15237	231	167	215	249	287
15238	76	39	79	86	121
15239	170	80	324	232	205
15243	35	8	17	75	75
15642	1		2	1	
15668			1		1
16059	5	3	1	2	4
16063	3	5	5	1	3
16115		1	1	3	1
Grand Total	16649	12490	21650	26117	27688

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

CAUSE-PA Set I-12

12. For each month from January 2015 through April 2020, disaggregated by month, please provide:
- (a) The number of CAP customers who have reached or exceeded their maximum CAP credit limit.
 - (b) For customers identified in (a), please specify the number of customers who are currently in arrears to Duquesne Light.

Response:

- (a) Please see CAUSE-PA I-12a.
- (b) Of the customers identified in response to (a), 4573 are in arrears as of June 30, 2020. Please note that whether a CAP customer ever reached their maximum CAP credit limit during the period January 2015 through April 2020 may bear little relationship to whether that customer is currently in arrears as of June 30, 2020. Moreover, not all of the customers identified in response to (a) are still Duquesne Light customers.

The Coalition For Affordable Utility Services and Energy Efficiency in Pennsylvania
(CAUSE-PA)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

CAUSE-PA Set I-14

14. Does Duquesne allows supplier to place non-basic service charges on a customer's utility bill?

Response:

Duquesne Light permits *bill ready* Electric Generation Suppliers (EGSs) to place non-basic service charges on the customer's utility bill. *Rate ready* Electric Generation Suppliers (EGSs) can charge a per kwh charge and or a flat/fixed fee, similar to our customer charge.



Customer Name and Service Address:



Account Number: [REDACTED]

Rate:RS-Residential Service

Date Prepared:06/17/20

Meter Reading Usage Information			Summary																																																	
Next Scheduled Meter Reading Date: July 17, 2020			Prior Billing Information																																																	
Meter Read Information for Meter Number: F74501780			Amount of Last Bill	\$19.29																																																
Present:	Jun 16, 2020 - Actual	17613.7770	Prior Account Balance	\$19.29																																																
Prior:	May 17, 2020 - Actual	17365.4440	Current Billing Information																																																	
	Difference	248.3330	DLC Basic Service Charges	\$30.79																																																
Your Meter Multiplier	X	1	Supplier Basic Service Charges	\$25.34																																																
	Total kWh Used	248.3330	TOTAL ACCOUNT BALANCE PAYABLE TO DLC	\$75.42																																																
Electric Usage:			ACTUAL METER READING BILL																																																	
Comparing Your Usage			For more information see www.duquesnelight.com.																																																	
	Jun 19	Jun 20	Give to Dollar Energy Fund to help people without heat or light. Make a monthly pledge at www.duquesnelight.com or send a check to Duquesne Light Hardship Fund Donations, 411 Seventh Avenue MD 15-1, Pittsburgh, PA 15219. Your gift is tax deductible.																																																	
Avg. kWh Per Day	9	8																																																		
Avg. Temperature (F)	67	68																																																		
YTD Usage (kWh)	1975	1781																																																		
<p> kWh: 418 315 210 105 0 J A S O N D J F M A M J ■ Prior 12 Months ▨ Latest 12 Months </p>																																																				
<table border="1"> <thead> <tr> <th colspan="12">DAYS IN BILLING PERIOD</th> </tr> <tr> <th>J</th><th>A</th><th>S</th><th>O</th><th>N</th><th>D</th><th>J</th><th>F</th><th>M</th><th>A</th><th>M</th><th>J</th> </tr> </thead> <tbody> <tr> <td>30</td><td>32</td><td>30</td><td>29</td><td>29</td><td>32</td><td>31</td><td>32</td><td>29</td><td>29</td><td>32</td><td>30</td> </tr> <tr> <td>30</td><td>32</td><td>30</td><td>29</td><td>30</td><td>31</td><td>33</td><td>29</td><td>29</td><td>33</td><td>29</td><td>30</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Average Monthly Usage for the past 12 months is 317 kWh. • Total Annual Usage for the past 12 months is 3804 kWh. 					DAYS IN BILLING PERIOD												J	A	S	O	N	D	J	F	M	A	M	J	30	32	30	29	29	32	31	32	29	29	32	30	30	32	30	29	30	31	33	29	29	33	29	30
DAYS IN BILLING PERIOD																																																				
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Estimated Gross Receipts Tax	Estimated PA State Taxes	Late Charge After July 8, 2020	Payment Due	Budget Amount Due																																																
\$3.32	\$3.81	1.25%	July 8, 2020	\$122.00																																																

Please return this portion with your payment. Please enclose check facing forward. Make payment payable to Duquesne Light Company in US Currency.

Account Number



PLEASE PAY THIS AMOUNT BY **JUL 8, 2020**

\$122.00

\$

USD Amount Enclosed

To make account changes, enroll in Autopay or pledge to the Dollar Energy Fund, please update information on the back of this coupon and check the box to the right.



DUQUESNE LIGHT COMPANY
 PAYMENT PROCESSING CENTER
 PO BOX 67
 PITTSBURGH, PA 15267-0001



How to Reach Us

Visit our Website at: www.duquesnelight.com
 Call us for: General information: 412-393-7100 (Residential)
 412-393-7300 (Business)
 Credit & Collection: 412-393-7200
 Emergencies: 1-888-393-7000 or 412-393-7000
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 Duquesne Light Company
 411 Seventh Avenue, MD 6-1
 Pittsburgh, PA 15230-1930
 Please call, email or write our business office for a copy of our rate schedules. For questions about your bill, please contact us before the bill due date or visit our website at DuquesneLight.com (Residential) or DuquesneLight.com/business (Business).

Understanding Your Bill

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Meter Multiplier – This is the number used to calculate total electrical usage in kWh, this number will vary depending on meter type.
Kilowatt-Hour (kWh) – The basic unit of electric energy for which most customers are charged. It equals the amount of electricity used by 10 100-watt light bulbs left on for one hour. A bill shows electricity charges in cents per kilowatt-hour.
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Advanced Metering – Device(s) for recording or communicating actual electric usage on a daily basis.

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CAP – CAP is Duquesne Light Company's discount program for residential customers whose total household income is at or below 150% of the federal poverty level. Customers enrolled in CAP may receive a discount on their monthly service charges and have an opportunity to receive arrears forgiveness. If you need help paying your bills, call and speak to a Customer Assistance Program specialist at 1-888-393-7600.
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E-Bill Service – Our free on-line bill presentment service. Once enrolled, you will no longer receive paper bills. You will receive an e-mail notification that your bill is available to view. You can sign up at www.duquesnelight.com
Automatic Bill Payment – Duquesne Light Company's free ElectricCheck service. After you join the plan, you no longer write checks. Your payment is automatically deducted from your checking account on the due date of the bill. You can apply at DuquesneLight.com or call us at 412-393-7100 (Residential) or 412-393-7300 (Business).
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Make a One-Time Payment – Credit card/check services. Go to our website at www.duquesnelight.com or call 1-866-526-0815. Fees apply.
U.S. Mail – Use the payment coupon and envelope we provide to return your payment to us.

Complete the information at the right to update your account.

If you are moving and need to have your service turned on or off for residential service, call us at 412-393-7100 or visit DuquesneLight.com. For business service, call us at 412-393-7300 or visit DuquesneLight.com/business.

For changes or corrections to be processed, check the box on the front of the coupon AND MAIL IN WITH YOUR PAYMENT.

Reason for change: _____
 Name: _____
 Street Address: _____
 City: _____
 State: _____ Zip: _____
 Primary Contact Phone #: (_____) _____
 Email Address: _____

Monthly Pledge to Dollar Energy Fund \$1.00 \$2.00 or other \$____.00
 Request to enroll in Autopay - check box for application request



Customer Name and Service Address:

[REDACTED]
 BILL ID: [REDACTED]

Account Number: [REDACTED]
Rate: RS-Residential Service
Date Prepared: 06/17/20

Duquesne Light Company Basic Service Charges

Current Charges

Customer Charge		12.67	
Distribution	248.3330 kWh@ 7.138300¢	17.73	
DSIC Surcharge	1.27%	0.39	
Total Current Charges			\$30.79
DLC Basic Service Charges (see Page 1 Summary)			\$30.79

The Price to Compare for your rate class is 7.11 cents/kWh. It will change every June and December. For more information & supplier offers visit www.PAPowerSwitch.com and www.oca.state.pa.us.

Duquesne Light Company Information

Effective Jun. 1, changes in the Customer Charge, reflecting costs to enhance the competitive energy market in PA, will decrease the monthly bill of a customer using 600 kWh by about \$0.02 or less than 1%.

Duquesne Light's WATT CHOICES offers energy efficiency programs to help customers save money by conserving energy and reducing demand. To participate or to learn more about these programs, visit www.wattchoices.com or call 1-888-WATTLEY.

Need to reach us? For residential assistance, call us at 412-393-7100 or visit DuquesneLight.com. For business assistance, call 412-393-7300 or visit DuquesneLight.com/business.

YOUR ACCOUNT IS PAST DUE. TO AVOID POSSIBLE TERMINATION OF ELECTRIC SERVICE, PLEASE PAY THE AMOUNT DUE SHOWN.

Thank you for participating in the budget plan. We will review your prior electric usage at least every four months and adjust the budget amount to reflect any changes. Any adjustments will change the budget amount you pay each month.

Please visit our website www.duquesnelight.com to sign up for electriccheck, and to learn about other convenient payment options.

Shopping Information Box

When shopping for electricity with an Electric Generation Supplier, please provide the following:

Supplier Agreement ID: [REDACTED]
Rate Schedule: RS-Residential Service

If you are already shopping, it is important to understand the terms of your contract and expiration date.

Supplier Basic Service Charges

Supplier Agreement ID: [REDACTED]

[REDACTED]

For questions regarding the supplier portion of your bill, call [REDACTED]

Current Charges

Customer Charge		4.50	
Generation-Trans	248.3330 kWh@ 8.3900¢	20.84	
Total Current Charges			\$25.34
Supplier Basic Service Charges (see Page 1 Summary)			\$25.34

- Generation/Supply prices and charges are set by the electric generation supplier you have chosen.
- The Public Utility Commission regulates distribution prices and services.
- The Federal Energy Regulatory Commission regulates transmission prices and services.

Non-Basic Service Charges

Currently you are not subscribing to any Non-Basic Services.



Customer Name and Service Address:



BILL ID: [REDACTED]

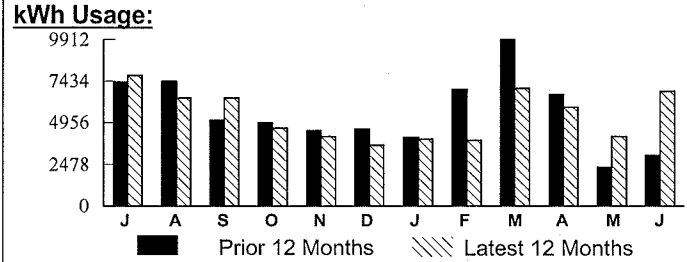
Account Number: [REDACTED]

Rate: GM-Medium Commercial > 25

Date Prepared: 06/22/20

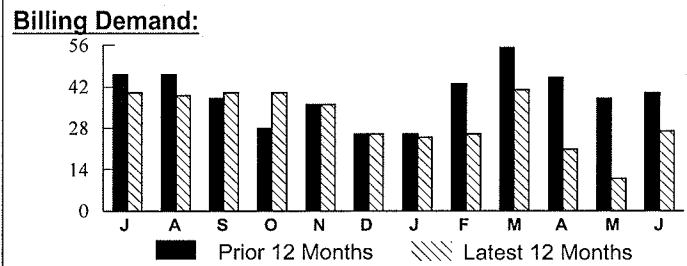
Usage & Demand Information **Summary**

Next Scheduled Meter Reading Date: July 20, 2020



- Average Monthly Usage for the past 13 months is 5221 kWh.
- Total Annual Usage for the past 13 months is 67871 kWh.
- The average temperature for the billing period was 2 degrees warmer than last year.

The Price to Compare (PTC) for your rate class is 5.33 per kWh. It will change quarterly beginning June 1. Your actual PTC may differ based on your specific demand and usage patterns. For more information and supplier offers, visit PAPowerSwitch.com.



Prior Billing Information

Total Amount of Last Bill	\$476.06
Payment(s) Received as of 06/08/20	-476.06
Prior Account Balance	\$0.00
DLC Basic Service Charges	\$285.71
Supplier Basic Service Charges	\$542.54
TOTAL ACCOUNT BALANCE PAYABLE TO DLC	\$828.25

ACTUAL METER READING BILL

For more information, visit DuquesneLight.com/business or call 412-393-7300.

Give to Dollar Energy Fund to help people without heat or light. Make a monthly pledge at www.duquesnelight.com or send a check to Duquesne Light Hardship Fund Donations, 411 Seventh Avenue MD 15-1, Pittsburgh, PA 15219. Your gift is tax deductible.

Estimated PA State Taxes	Late Charge After July 8, 2020	Payment Due	Amount Due
\$19.43	1.25%	July 8, 2020	\$828.25

Please return this portion with your payment. Please enclose check facing forward.
 Make payment payable to Duquesne Light Company in US Currency.

Account Number [REDACTED] PLEASE PAY THIS AMOUNT BY **JUL 8, 2020**
\$828.25

\$

USD Amount Enclosed

To make account changes, enroll in Autopay or pledge to the Dollar Energy Fund, please update information on the back of this coupon and check the box to the right.



DUQUESNE LIGHT COMPANY
 PAYMENT PROCESSING CENTER
 PO BOX 10
 PITTSBURGH, PA 15230-0010

How to Reach Us

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U.S. Mail – Use the payment coupon and envelope we provide to return your payment to us.

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For changes or corrections to be processed, check the box on the front of the coupon AND MAIL IN WITH YOUR PAYMENT.

Reason for change: _____

Name: _____

Street Address: _____

City: _____

State: _____ Zip: _____

Primary Contact Phone #: (_____) _____

Email Address: _____

Monthly Pledge to Dollar Energy Fund \$1.00 \$2.00 or other \$ _____.00

Request to enroll in Autopay - check box for application request



Customer Name and Service Address:



BILL ID: [REDACTED]

Account Number: [REDACTED]
Rate: GM-Medium Commercial > 25
Date Prepared: 06/22/20

Meter Information

Meter No.	Voltage	Meter Constant	Kilowatt Hour Information					
			Service Period		Meter Readings		Difference	kWh
			From	To	Prior	Present		
[REDACTED]	120/208V	80.0000	05/18/20	06/17/20	2840.8130	2926.3500	85.5370	6842.9600
Total Used								6842.9600

Meter No.	Voltage	Meter Constant	Reactive Information					
			Service Period		Meter Readings		Difference	kVARh
			From	To	Prior	Present		
[REDACTED]	120/208V	80.0000	05/18/20	06/17/20	1254.3200	1307.2980	52.9780	4238.2400
Total Used								4238.2400

Meter No.	Voltage	Meter Constant	Demand Information								
			Service Period		Demand Readings		kW		PFM	Adj. kW	
			From	To	On-Peak	Off-Peak	On-Peak	Off-Peak			
[REDACTED]	120/208V	80.0000	05/18/20	06/17/20	0.3320			26.5600		1.0000	26.5600
Total Demand Billing											26.5600

Duquesne Light Company Basic Service Charges

Current Charges	Billing Period 1.00 Months	
Customer Charge		65.70
Demand Distribution	21.5600 kW@ \$6.54	141.00
Energy Distribution	6842.9600 kWh@ 0.968500¢	66.27
PA EEA Surcharge	2965.2827 kWh@ 0.1700¢	5.04
PA EEA Surcharge	3877.6773 kWh@ 0.1300¢	5.04
Smart Meter Charge Three-Phase	1 MTR@ \$-0.94	-0.94
DSIC Surcharge	1.27%	3.58
Pennsylvania Tax Adjustment		0.02
Total Current Charges		\$285.71
DLC Basic Service Charges (see Page 1 Summary)		\$285.71

Duquesne Light Company Information

Duquesne Light's WATT CHOICES offers energy efficiency programs to help customers save money by conserving energy and reducing demand. To participate or to learn more about these programs, visit www.wattchoices.com or call 1-888-WATTLEY.

Need to reach us? For residential assistance, call us at 412-393-7100 or visit DuquesneLight.com. For business assistance, call 412-393-7300 or visit DuquesneLight.com/business.

Duquesne Light submits monthly credit reporting data to Dun & Bradstreet, Experian and Equifax for our commercial and industrial customers.

Please visit our website www.duquesnelight.com to sign up for electriccheck, and to learn about other convenient payment options.

Effective Jun. 1, changes in the Customer Charge, reflecting costs to enhance the competitive energy market in PA, will decrease the monthly bill of a medium commercial customer using 30 kW and 10,000 kWh by about \$0.04 or less than 1%.

Effective Jun. 1, changes in the Energy Efficiency Surcharge, reflecting costs related to the Watt Choices program, will decrease the monthly bill of a medium commercial customer using 30 kW and 10,000 kWh by about \$4 or less than 1%.

Shopping Information Box

When shopping for electricity with an Electric Generation Supplier, please provide the following:

Supplier Agreement ID: [REDACTED]
 Rate Schedule: GM-Medium Commercial > 25

If you are already shopping, it is important to understand the terms of your contract and expiration date.

Supplier Basic Service Charges

Supplier Agreement ID: [REDACTED]



Customer Name and Service Address:

[REDACTED]

BILL ID: [REDACTED]

Account Number: [REDACTED]
Rate: GM-Medium Commercial > 25
Date Prepared: 06/22/20

[REDACTED]

Current Charges

Billing Period: 05/19/20 - 06/17/20

Energy 6842.96 kWh at \$0.07468 per kWh	511.03
05/19 - 05/31 22.68kW @ \$-0.00409 for 13	-1.21
06/01 - 06/17 22.68kW @ \$0.00651 for 17	2.51
FERC PJM Transmission Enhancement Settle	-1.06
FERC PJM Transmission Enhancement Settle	-0.74
Gross Receipt Reimbursement	32.01
Trans Tariff Change	
Reliability Must Run, Transmission Tag	

Total Current Charges \$542.54

Supplier Basic Service Charges (see Page 1 Summary) \$542.54

- Generation/Supply prices and charges are set by the electric generation supplier you have chosen.
- The Public Utility Commission regulates distribution prices and services.
- The Federal Energy Regulatory Commission regulates transmission prices and services.

Non-Basic Service Charges

Currently you are not subscribing to any Non-Basic Services.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

OCA I- 13

13. Has DLC undertaken any analysis to compare the price customers in the Standard Offer Referral Program pay compare to the Price to Compare during the term of the Standard Offer contract fixed price offer? If so, provide the results of such an analysis. If not, why not?

Response:

As required by the Commission-approved program, customers who enroll with an EGS through SOP choose a fixed price 7% below the Company's then-effective price to compare ("PTC") for a period of 12 months. The Company ensures that this requirement is met when a customer enrolls. There is no requirement in the SOP that EGS prices remain below the PTC during the entire term of the Standard Offer contract fixed price. Therefore, DLC has not undertaken such analysis. See response to OCA I-14.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

OCA I- 16

16. Has DLC undertaken any analysis of the frequency in which Standard Offer Referral program customers return to Default Service during or at the end of their 12-month fixed price contract with the EGS? If so, provide this information.

Response:

DLC has not conducted this type of analysis.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

OCA I- 20

20. Has DLC conducted any research and/or surveys of its customers concerning their understanding of or experience as a result of the customer's participation in the Standard Offer Referral Program? If so, provide the results of that research.

Response:

DLC has not conducted this type of research.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set II

Witness: Katherine M. Scholl

OCA-II-11

11. Does DLC propose to educate CAP customers about the CAP shopping program if it is approved? Please describe the educational messaging, manner of transmittal of educational messaging, and associated costs that DLC estimate will be incurred for this purpose.

Response:

DLC proposes to support the CAP shopping program through the following channels or methods:

- 1) Information available about CAP Shopping on the CAP area of the website <https://www.duquesnelight.com/account-billing/payment-assistance/customer-assistance-program>.
- 2) On-bill messaging informing CAP customers that it is now possible for them to shop for a supplier.
- 3) DLC will provide training to both Customer Service Representatives (CSRs) and CAP representatives at our Community Based Organizations (CBOs) who provide front-line support for CAP customers, to facilitate direct discussions about CAP shopping with eligible customers.

Each of these methods can be implemented at little to no cost.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

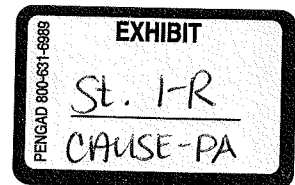
Petition of Duquesne Light Company for :
Approval of a Default Service Program for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

REBUTTAL TESTIMONY OF HARRY GELLER

ON BEHALF OF

THE COALITION FOR AFFORDABLE UTILITY SERVICES AND
ENERGY EFFICIENCY IN PENNSYLVANIA ("CAUSE-PA")

August 14, 2020



1 **PREPARED REBUTTAL TESTIMONY OF HARRY GELLER**

2 **Q. Please state your name, occupation, and business address.**

3 A. Harry Geller. I am an attorney. I am currently retired from the Pennsylvania Utility Law
4 Project (PULP), though I have maintained an office at their location, 118 Locust St., Harrisburg,
5 PA 17101 and serve as a consultant to organizations representing the interests of low income
6 consumers. Since the Governor's Emergency Order regarding the Covid-19 pandemic, I have been
7 working from 4213 Orchard Hill Rd, Harrisburg, PA, 17110.

8 **Q: Did you submit direct testimony in this proceeding?**

9 A: Yes. My direct testimony was premarked as CAUSE-PA Statement 1.

10 **Q. Please state the purpose of your rebuttal testimony.**

11 A: The purpose of my rebuttal testimony is to respond to the Direct Testimony of Christopher
12 H. Kallaher on behalf of Interstate Gas Supply, Inc., Shipley Choice LLC, NRG Energy, Inc.,
13 Vistra Energy Corp., Engie Resources LLC, WGL Energy Services, Inc., and Direct Energy
14 Services (collectively, EGS Parties). Specifically, I will address Mr. Kallaher's assertions
15 regarding the competitive market as a whole, as well as his recommendations regarding
16 Duquesne's Standard Offer Program (SOP) and Customer Assistance Program (CAP) shopping
17 proposals.

18 As I indicated in my direct testimony, the unfortunate reality is that residential ratepayers,
19 in significant numbers, have entered and participated in the competitive market and have not
20 received the bill savings they were promised and were expecting. This problem has not been
21 caused by the continued existence of default service in its present form, or by the regulated billing
22 practices of default service providers, but by suppliers themselves. The solution to this clear and
23 prolonged pattern of excessive charges is not to make default service more expensive for those

1 who have made a choice not to shop – or to circumvent critical protections for residential
2 consumers. Indeed, the Commission has repeatedly rejected attempts to do so in the past – both
3 in individual utility proceedings and in the context of comprehensive statewide investigations.
4 Rather, the Commission must take steps to protect residential consumers and reform existing
5 ratepayer-supported “retail market enhancement” programs in order to avoid continuing the harm
6 caused by excessive competitive market prices.

7 I note that a number of issues raised in the direct testimony of other parties in this
8 proceeding involve legal interpretations and questions that are properly reserved for briefing. I
9 will not comment on any issues which are strictly legal in nature, or which otherwise do not require
10 additional factual context or information for the purpose of this rebuttal testimony

11 Moreover, my silence in response to any witnesses’ direct testimony in this proceeding
12 should not be construed as an agreement therewith. Unless required for context or clarification in
13 providing a further response to other parties’ direct testimony, I will not reiterate the extensive
14 arguments, evidence, and recommendations that I provided in my direct testimony. Rather, to the
15 extent an argument raised by any party was already sufficiently addressed in my direct testimony,
16 I do not intend to respond, and stand firmly on the evaluation, analysis, and recommendations
17 contained in my direct testimony. Nothing proposed by any other witness has changed my initial
18 conclusions or recommendations.

19 **Q: Please summarize Mr. Kallaher’s testimony to which you intend to respond.**

20 A: Mr. Kallaher discusses the competitive market generally, arguing that the market “is in
21 stagnation at best, in decline at worst.” (EGS Parties St. 1 at 5:10). He asserts that the market in
22 Duquesne’s service territory is now “only a shadow of what it could be” – which he blames on
23 “the presence of a domineering default service provider (‘DSP’).” (Id. at 6:3-12). Mr. Kallaher

1 laments the fact that Electric Distribution Companies ('EDCs') conduct billing and collections
2 activities, and argues that suppliers cannot establish a direct relationship with their customers
3 because they cannot send customers a single, supplier consolidated bill. (Id. at 5:19-6:12, 7:5-11).
4 Mr. Kallaher also claims (without support) that there is "persistent cross-subsidization" of default
5 service by shopping customers. (Id. at 6:3-12). He complains of a "perception that the competitive
6 market does not deliver fair prices" – arguing that this "perception" leads to "the exclusion [of
7 CAP customers] from the competitive market" and is "rooted in the incorrect notion ... that the
8 default service price is a reasonable proxy for a 'market price.'" (Id. at 8:11-19).

9 To resolve his supposed market design issues, Mr. Kallaher submits as an overarching and
10 paradigm changing premise, that the Commission should "transition away" from allowing EDCs
11 to serve as the default service. (Id. at 9:10-13). Specifically for this case, and in relevant part, Mr.
12 Kallaher recommends that the Commission (1) require Duquesne to make an additional filing
13 demonstrating its service "is not a 'state subsidy' for purposes of the FERC MOPR rule"; (2)
14 require Duquesne to force all new and moving customers to select a supplier through the SOP; and
15 (3) weaken proposed pricing protections for vulnerable low income consumers enrolled in
16 Duquesne's Customer Assistance Program (CAP). (Id. at 9:14-23).

17 **COMPETITIVE MARKET - GENERALLY**

18 **Q: Do you agree with Mr. Kallaher that the competitive market is "in stagnation", and**
19 **that Duquesne should "transition away" from its role as default service provider?**

20 **A:** No. Competitive suppliers have never been promised or guaranteed any specific share of
21 the market. I believe the slow-down in the growth of residential shopping rates – which Mr.
22 Kallaher characterizes as "stagnation" – is more likely the result of approximately twenty years of
23 consumers experiencing the effects of the competitive market on their pocketbooks as a result of

1 persistent excessive pricing. Consumers have the right to choose to remain in the security of default
 2 service, to venture into the market, or to go back and forth. Each of these affirmative choices is
 3 their statutory right. It seems to me that this is precisely what the Choice Act intended. Contrary
 4 to Mr. Kallaher’s claim that there is a mere “perception” of unfair pricing in the market, the data
 5 in this proceeding shows that unfair pricing in the competitive market is an unfortunate *reality*. As
 6 I explained in direct testimony, Duquesne’s residential shopping consumers have paid a *net*
 7 average of \$102.9 million dollars more than the price to compare – just in the last three years.
 8 (CAUSE-PA St. 1 at 8). Even as our economy faced devastating losses in the first three months
 9 of the pandemic, from March through May, residential shopping customers were charged roughly
 10 \$8,208,121.09 more than they otherwise would have been charged for default service. (CAUSE-
 11 PA Exhibit 1).¹ While we do not yet have the data for June and July, I am confident that the same
 12 trend in supplier pricing continued through these months – despite the ongoing and profound
 13 economic harm associated with the pandemic on residential ratepayers.

14 The primary purpose of establishing a competitive electric shopping market for residential
 15 consumers is price.² This goal is manifested by the Commission’s longstanding competitive market

¹ I note that tens of thousands of Duquesne’s residential consumers now face imminent loss of utility service for non-payment of utility bills in those months. See COVID-19 Customer Service, Billing, and Public Outreach Provisions Request for Utility Information, Response of Duquesne Light, Docket No. M-2020-3020055.

Duquesne Residential Terminations				
March 2019	May 2019	May 2020	% Increase March 2019/May 2020	% Increase May 2019/May 2020
47,366	33,376	54,114	14.2%	62.1%

While time in this proceeding did not allow for this inquiry, more research and analysis should be done to determine the level of arrears accrued throughout the pandemic that are attributable to supplier charges in excess of the price to compare.

² See 66 Pa. C.S. § 2802(4)-(7).

1 tagline: “Shop. Switch. Save.”³ However, many residential consumers are choosing not to shop
2 out of concern they may be burned by a high cost contract. In light of this data and evidence, I am
3 not at all surprised that shopping numbers have declined in recent years. This is a rational economic
4 response of consumers to repeated and prolonged overcharging in the competitive market.

5 Contrary to Mr. Kallaher’s suggestions, the “solution” to any “stagnation” in the number
6 of residential shopping customers is not to remove Duquesne from the role of default service
7 provider – or to transition default service to an auction model that will make default service more
8 costly and less predictable. (See EGS Parties St. 1 at 8-9). Removing Duquesne from its role as
9 default service provider would disrupt the critical safety net that default service was intended to
10 provide – allowing all those who do not shop in the competitive market to continue to obtain stable,
11 regulated electric service at the least cost over time. Duquesne has no stake in the provision of
12 competitive supply, as it no longer makes a profit from the sale of generation. Shifting the role of
13 default service provider to a supplier, who is motivated by profit and is actively competing for
14 market share, would infuse competition and its inherent risks into the default service model -
15 undermining the strength and stability of the default service safety net.

16 In turn, Mr. Kallaher’s recommendations to *inflate the cost of default service* by shifting
17 additional costs onto default service customers should likewise be rejected. (See EGS Parties St.
18 1 at 9:22-23). Even if one accepts the premise that making default service more expensive for
19 residential consumers would drive more people into the market, such a goal (to increase the cost
20 of service to drive market adoption) is nowhere to be found in the Choice Act, and the result would

³ See Pa PUC, Take Charge of Your Electric Bill,
http://www.puc.pa.gov/General/consumer_ed/pdf/PAPowerSwitch-Take_Charge_FS.pdf.

1 nevertheless conflict with, and not advance, the clear statutory objectives of the Choice Act to
2 reduce electricity costs.⁴

3 Finally, Mr. Kallaher's passing suggestion that suppliers be permitted to conduct
4 collections activities and offer consolidated billing (commonly referred to as supplier consolidated
5 billing (SCB)) should likewise be rejected. (EGS Parties St. 1 at 7:7-11). First, Mr. Kallaher's
6 suggestion that suppliers be empowered to perform collections actions against residential
7 consumers has a host of legal and policy issues which – to the extent necessary – is more
8 appropriately addressed through briefing.⁵ Moreover, adoption of SCB would only make it more
9 difficult for consumers to compare supplier prices against the price to compare or to access critical
10 statutory and regulatory consumer protections through Chapters 14 and 15 of the Public Utility
11 Code and Chapter 56 of the Commission's regulations. Importantly, Mr. Kallaher's assertion that
12 suppliers cannot bill customers directly is factually inaccurate. Suppliers are free to send bills for
13 electric supply directly to their customers.⁶ Suppliers just cannot send a *consolidated* bill that also
14 collects Duquesne's distribution rates.

15 There are a number of legal and policy reasons why SCB cannot be approved in
16 Pennsylvania - all of which have been previously addressed at length in other record proceedings.⁷

⁴ See 66 Pa. C.S. § 2802(4)-(7). Importantly, the Choice Act previously provided that EDCs were required to serve non-shopping customers at the “prevailing market prices.” Act 129 explicitly repealed that standard – opting to instead adopt the more prudent “least cost to customers over time” standard and to require utilities to procure a “prudent mix” of contracts to achieve this balance. 66 Pa.C.S. § 2807(e)(3.4).

⁵ See 66 Pa. C.S. § 2807(d) (“Consumer protections and customer service. – The electric distribution company shall continue to provide customer service functions consistent with the regulations of the commission, including meter reading, complaint resolution and collections.

⁶ See 66 Pa. C.S. § 2807(c); see also Investigation of Pennsylvania's Retail Electricity Market: End State Default Service, Final Order, Docket I-2011-2237952, at 64 (Feb. 14, 2013).

⁷ See, e.g., *En Banc* Hearing on Implementation of Supplier Consolidated Billing, Joint Comments and Reply Comments of the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA) and

1 In short, SCB is inconsistent with the Choice Act; circumvents the requirements of Chapter 14 and
2 15 of the Public Utility Code and Chapter 56 of the Commission’s regulations regarding residential
3 customer billing, credit, and collections standards; harms competition; is incompatible with critical
4 universal service programs; would harm vulnerable residential ratepayers; and is cost prohibitive.⁸
5 For the sake of brevity, I will not reiterate each of those legal and policy arguments in detail,
6 though I have attached a copy of CAUSE-PA’s comments and reply comments in the
7 Commission’s current *en banc* SCB investigation as Appendix A and B, and incorporate those
8 comments and reply comments by reference herein.

9 Although NRG and other members of the EGS Parties have pushed for approval of SCB
10 for many years, most recently through the current statewide Commission investigation that
11 included multiple days of *en banc* testimony, the Commission has not issued a decision in that
12 investigation. Given the pendency of that proceeding, it would appear to be inappropriate to do so
13 here, in this proceeding.

14 **COMPLIANCE WITH FERC MOPR / PJM TARIFF REVISION**

15 **Q: You noted above that Mr. Kallaher recommends that Duquesne make an additional**
16 **filing to demonstrate that its service “is not a ‘state subsidy’ for purposes of the FERC**
17 **MOPR rule.” (EGS Parties St. 1 at 9:14-16). Please briefly explain the basis of Mr.**
18 **Kallaher’s recommendation.**

19 **A: Mr. Kallaher asserts that he has “serious concerns” that Duquesne’s DSP may not meet**
20 **FERC’s minimum offer price rule (MOPR) and PJM’s associated tariff revision, which would**

the Tenant Union Representative Network and Action Alliance of Senior Citizens of Greater Philadelphia, Docket No. M-2018-2645254 (filed May 4, 2018 and Aug. 24, 2018, respectively).

⁸ See *id.*, attached hereto as Appendix A and B.

1 require default service providers to “establish market-based compensation for a default generation
2 supply product that retail customers can avoid paying for by obtaining supply from a competitive
3 retail supplier of their choice.” (EGS Parties’ St. 1 at 12:34 to 13:10).

4 In relevant part, Mr. Kallaher asserts that by restricting CAP customers to offers that do
5 not exceed the default service price, Duquesne “effectively deprives [CAP] customers of the ability
6 to avoid the default service supply costs by holding them captive to the default rate” (Id. at 13:15-
7 20). He asserts that this may violate the MOPR, and PJM’s tariff.

8 **Q: Do you share Mr. Kallaher’s concerns that Duquesne “effectively deprives [CAP]
9 customers of the ability to avoid the default service supply costs by holding them captive to
10 the default rate” (Id. at 13:15-20)?**

11 A: No. Mr. Kallaher’s assertions on this point are unfounded. The Commonwealth Court has
12 already recognized “the PUC may impose CAP rules that would limit the terms of any offer from
13 an EGS that a customer could accept and remain eligible for CAP benefits – *e.g.*, an EGS rate
14 ceiling, a prohibition against early termination/cancellation fees, etc.”⁹ The Court recognized that
15 CAP customers are able to leave CAP at any time to participate in the competitive market without
16 restriction. The obligation to provide low income programs falls on the public utility under the
17 Choice Act, not the EGSs. Duquesne Light is required to administer its CAP in an efficient and
18 cost effective manner, and must ensure that its programming is accessible to those in need. Rules
19 to prohibit or otherwise restrict the offers that a CAP customer may select are imposed to reduce
20 the financial harm to program participants and other ratepayers. To participate in the program, the
21 consumer must follow the rules, but they are under no obligation to participate in the program.

⁹ CAUSE-PA et al. v. Pa. PUC, 120 A.3d 1087, 1104 (Commw. Ct., July 14, 2015).

1 **STANDARD OFFER PROGRAM**

2 **Q:** As you note above, Mr. Kallaher recommends that Duquesne require all new and
3 moving customers to select a supplier through the SOP. (EGS Parties St. 1 at 9:16-18). What
4 is the basis of Mr. Kallaher's recommendation?

5 A: Mr. Kallaher asserts that Duquesne may be violating federal antitrust laws by defaulting
6 new and moving customers to default service. (EGS Parties St. 1 at 15:16-17 (citing US v.
7 Microsoft, 253 F.3d 34 (DC Cir. 2001)). Apart from citing a D.C. Circuit case from 2001 regarding
8 bundled computer and internet software, Mr. Kallaher provides no further support for this rather
9 provocative assertion, though he goes on to argue that defaulting new and moving customers to
10 default service places suppliers at a competitive disadvantage. Mr. Kallaher asserts that new and
11 moving customers "typically consider new options for the goods and services they buy on a regular
12 basis" and concludes that the "simple solution" is for Duquesne to require all new and moving
13 customers into the market - whether they like it or not. (EGS Parties St. 1 at 16:3-17). According
14 to Mr. Kallaher's proposal, Duquesne would be required to transfer all new and moving customers
15 to AllConnect to present the customers with "some number of options for electric service as part
16 of the enrollment process for Duquesne's delivery service." (EGS Parties St. 1 at 16:9-17).

17 **Q:** Do you agree with Mr. Kallaher?

18 A: No. First, Mr. Kallaher's antitrust argument is an unsupported legal assertion that is outside
19 the Commission's jurisdiction to address, and should be ignored. To the extent necessary, this
20 issue can be further addressed through briefing.

21 I also strongly oppose Mr. Kallaher's recommendation that all new and moving customers
22 be transferred to AllConnect to select from "some number of options for electric service as part of
23 the enrollment process." (Id.). Default service serves as an equalizer in the market – ensuring that

1 new and moving customers can initiate service while they learn about the competitive market and
2 evaluate offers - rather than forcing customers to make an 'on the spot' selection amongst
3 suppliers. Importantly, there is nothing stopping a consumer from asking to switch to a selected
4 supplier when they call to establish service at a new address.

5 If a new or moving customer is interested in shopping at the time they establish service,
6 but isn't sure which supplier to select, they are able to do so through the SOP – even if they do not
7 know the name of a supplier they would like to choose before calling to establish service. Mr.
8 Kallaher's proposal is to have AllConnect – at the outset of the new or moving customer's initial
9 contact – start them off with an EGS outside of the SOP. This proposal is intended to be “a robust
10 *alternative* to the proposed SOP for new and moving customers.” (EGS Parties St. 1 at 16:7-8
11 (emphasis added)). Importantly, it is not at all clear how Mr. Kallaher envisions his
12 recommendation “for an alternative” will work with the SOP. If all new and moving customers
13 are *required* to select a supplier during the initial service enrollment, then no residential customer
14 would be eligible to receive a discount through the SOP because they would have already selected
15 a supplier by the time the SOP is offered at the conclusion of the call.

16 Moreover, I am concerned that Mr. Kallaher's proposal may only benefit a few suppliers,
17 and would work as a competitive disadvantage to suppliers who are not able or do not wish to
18 separately market their services through AllConnect. Requiring Duquesne to funnel all new and
19 moving customers through AllConnect during the initial enrollment call may help certain suppliers
20 to corner the market by securing contracts with AllConnect to market their products.

21 Finally, I am very concerned about Mr. Kallaher's attempt to strip consumers of their
22 statutory right in Pennsylvania to remain with their default service provider if they so choose.
23 Default service is statutorily required to be offered at the least cost over time – a fact which many

1 consumers find appealing. While Mr. Kallaher perceives the Lone Star State model as the gold star
2 standard, the Pennsylvania statutory and regulatory scheme governing the competitive market
3 generally – and default service specifically - are quite different, and have never accepted the wild
4 west approach as a substitute for the Pennsylvania structure which values default service as an
5 option for consumers who choose not to engage in the market.

6 **CAP SHOPPING PROPOSAL**

7 **Q: You note above that Mr. Kallaher proposes to weaken the pricing protections that**
8 **Duquesne proposed for low income shopping consumers enrolled in its Customer Assistance**
9 **Program (CAP). Please explain Mr. Kallaher’s recommendation.**

10 A: Mr. Kallaher makes two proposals. First, he argues that CAP customers should be rolled
11 onto a new contract with their existing supplier if they do not affirmatively select a new supplier
12 or request to return to default service at the end of their contract. (EGS Parties St. 1 at 18:2-8).
13 Second, Mr. Kallaher argues that CAP customers should be permitted to enroll in Duquesne’s SOP
14 “provided they are served on a CAP-compliant product by the participating EGS.” (EGS Parties
15 St. 1 at 18:9-13).

16 **Q: What is your response to Mr. Kallaher’s CAP shopping recommendations?**

17 A: First, I continue to assert that Duquesne’s current CAP shopping policy, which prohibits
18 CAP customers from shopping in the competitive market, has proven to be the only effective and
19 verifiable way to protect CAP customers and the other residential ratepayers who subsidize the
20 program from significant financial harm as well as protecting low income consumers from other
21 negative health and safety impacts associated with utility unaffordability. (CAUSE-PA St. 1 at
22 32-52).

1 Nevertheless, should Duquesne's CAP shopping proposal be permitted, I oppose the
2 adoption of Mr. Kallaher's CAP shopping proposals. With regard to Mr. Kallaher's first proposal,
3 I am concerned that Duquesne may not have the ability to monitor pricing for a roll-over contract
4 through the EDI transaction process. (See Duquesne St. 5 at 14:4-7). Thus, permitting CAP
5 customers to roll over onto a new contract in this manner may frustrate Duquesne's ability to
6 monitor supplier compliance with CAP shopping rules and, in turn, its obligation to ensure its CAP
7 is and remains accessible and cost-effective for those in need.

8 Mr. Kallaher's second recommendation, that CAP customers participate in Duquesne's
9 SOP, suggests that he does not understand or appreciate the rules of Duquesne's SOP and CAP
10 shopping proposals. By definition, an SOP contract is not compliant with the CAP shopping rules.
11 Under the SOP, a supplier must offer a price that is 7% off the default service price *at the time the*
12 *customer enters the program* – but there is no guarantee that the SOP price will remain below the
13 default service price for the duration of the 12-month program. If the default service price changes,
14 the discount that an SOP customer receives may or may not remain at or below the price for default
15 service. If the SOP price were to ever go above the applicable default service price, the SOP
16 contract would violate Duquesne's proposed rules for CAP shopping. While a CAP customer
17 could cancel the SOP contract, it is unlikely they would know to do so at the time the pricing was
18 switched.

19 For these reasons, Mr. Kallaher's CAP shopping recommendations must be rejected.

20 **Q: Does this conclude your rebuttal testimony?**

21 A: Yes.

CAUSE-PA Statement 1-R
APPENDIX A

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

En Banc Hearing on Implementation of
Supplier Consolidated Billing

:
:
:
:

Docket No. M-2018-2645254

**JOINT COMMENTS OF
THE COALITION FOR AFFORDABLE UTILITY SERVICES AND ENERGY
EFFICIENCY IN PENNSYLVANIA (CAUSE-PA)
AND
THE TENANT UNION REPRESENTATIVE NETWORK AND ACTION ALLIANCE OF
SENIOR CITIZENS OF GREATER PHILADELPHIA (TURN *ET AL.*)**

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I. INTRODUCTION

The Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA), together with the Tenant Union Representative Network and Action Alliance of Senior Citizens of Greater Philadelphia (TURN *et al.*) (collectively referred to herein as the Low Income Advocates), file these Comments in response to the Public Utility Commission's (Commission) March 27, 2018 Secretarial Letter. The Low Income Advocates have substantial concerns about the impact of Supplier Consolidated Billing (SCB) on the ability of households to access critical energy services on reasonable terms and conditions and consistent with the laws and regulations of the Commonwealth of Pennsylvania. We appreciate the opportunity to share these concerns with the Commission. The Low Income Advocates submit that the current paradigm of utility-consolidated billing (UCB) with a purchase of receivables program is effective, and levels the playing field for access to the competitive market. We urge the Commission to resist the call to radically depart from the statutorily prescribed billing, collection, and termination standards for essential utility services in Pennsylvania.

CAUSE-PA is a statewide unincorporated association of low-income individuals which advocates on behalf of its members to enable consumers of limited economic means to connect to and maintain affordable water, electric, heating and telecommunication services. CAUSE-PA membership is open to moderate- and low-income individuals residing in the Commonwealth of Pennsylvania who are committed to the goal of helping low-income families maintain affordable access to utility services and achieve economic independence and family well-being.

The Tenant Union Representative Network (TURN) is a not-for-profit corporation with many low and lower income members. TURN's mission is to advance and defend the rights and interests of tenants and homeless people. TURN's goal is to guarantee that all Philadelphians have

equal access to safe, decent, accessible, and affordable housing. Action Alliance of Senior Citizens of Greater Philadelphia (Action Alliance) is a not-for-profit corporation and membership organization whose mission is to advocate on behalf of senior citizens on a wide range of consumer matters vital to seniors, including utility service. As part of advancing the respective interests of tenants and seniors, TURN and Action Alliance advocate on behalf of low and moderate income residential customers of public utilities in Philadelphia in proceedings before the PUC.

On behalf of our clients, we are requesting the opportunity to testify before the Commission *En Banc* at the June 14, 2018 hearing. CAUSE-PA and TURN *et al.* are well-known and respected advocates for Pennsylvania's low income utility consumers, and have first-hand knowledge, experience, and expertise with the intricacies of Chapters 14 and 56; the mandates of the Electricity Generation Customer Choice and Competition Act (Choice Act); and the Universal Service program design in each utility service territory across the state. SCB crosses each of these critical topics, as discussed in further detail below. The Low Income Advocates not only have expertise on this area of law, we also have substantial experience with the impact of these laws, policies, and procedures on low income populations, as well as the ability of the competitive market to serve their unique needs.

II. BACKGROUND

On March 27, 2018, the Commission issued a Secretarial Letter, notifying interested parties that the Commission would hold an *en banc* hearing on Thursday, June 14, 2018 at 1:00 pm, and inviting interested parties to submit comments by May 4, 2018. The stated purpose of the hearing was to address three issues: "(1) whether SCB is legal under the Public Utility Code and Commission regulations; (2) whether SCB is appropriate and in the public interest as a

matter of policy, and (3) whether the benefits of implementing SCB outweigh any costs associated with implementation.”¹

The Secretarial Letter was issued following the Joint Motion of Chairman Gladys M. Brown and Commissioner Norman J. Kennard to Deny the Petition of NRG Energy, Inc. for Implementation of Electric Generation Supplier Consolidated Billing (SCB). NRG’s petition failed because it “lack[ed] sufficient detail to substantiate a definitive determination on both the policy prudence and legality of numerous pivotal issues,” but the Commission nonetheless expressed a desire to better understand the prudence and legality of SCB.²

The Joint Motion recognized that the Commission “has a long history of deliberating SCB,” but noted that the Commission had not squarely addressed the legality.³ Indeed, prior to the NRG proceeding, the Commission assessed and rejected SCB as part of its comprehensive Retail Market Investigation, and instead opted to implement revisions to the Utility Consolidated Bill (UCB) to more prominently feature the supplier’s information.⁴ In doing so, the Commission explained:

We believe that [the joint bill] approach offers several advantages over creating an SCB environment at this time. As we have noted, we fully expect that this approach will require fewer resources than would be required to implement an SCB environment. In addition, this approach does not raise the consumer protections concerns expressed by OCA, PULP, PCADV and others, since we are not changing the entity that is billing and collecting from the consumers.⁵

¹ En Banc Hearing on Implementation of Supplier Consolidated Billing, Secretarial Letter, Docket M-2018-2645254 (March 27, 2018).

² Petition of NRG Energy, Inc. for Implementation of Electric Generation Supplier Consolidated Billing, Joint Motion of Chairman Gladys M. Brown and Commissioner Norman J. Kennard, Docket No. P-2016-2579249 (Jan. 18, 2018).

³ Id.

⁴ Investigation of Pennsylvania’s Retail Electricity Market: End State of Default Service, Final Order, Docket No. I-2011-2237952, at 68 (Feb. 14, 2013).

⁵ Id.

Ultimately, changes to the UCB were ordered in May 2014, just four years ago.⁶ To the Low Income Advocates' knowledge, the impact of the changes to UCB have not been evaluated to assess whether the efforts were successful or whether additional, incremental changes may be warranted.

The Low Income Advocates were active in the NRG proceeding, as well as the Commission's Retail Market Investigation and the subsequent Joint Bill proceeding.⁷ We were then, and remain now, strongly opposed the introduction of SCB in Pennsylvania. As we explain at length below, SCB is legally unsound, dangerous for consumers, and unjustifiably costly.

III. COMMENTS

A. Supplier Consolidated Billing is not permitted under the Public Utility Code.

SCB is not authorized by law and directly conflicts with a number of statutory provisions. Significant legislative changes to multiple chapters within the Pennsylvania Public Utility Code would be necessary to allow SCB to proceed in Pennsylvania. These legal barriers pose an insurmountable hurdle for the Commission to act without legislative change. Nevertheless, as discussed in later sections, the Commission should reject SCB notwithstanding the lack of statutory authority, as it is not in the public interest.

⁶ Investigation of Pennsylvania's Retail Electricity Market: Joint Electric Distribution Company – Electric Generation Supplier Bill, Final Order, Docket No. M-2014-2401345 (May 23, 2014).

⁷ See Petition of NRG Energy, Inc. for Implementation of Electric Generation Supplier Consolidated Billing, Petition to Intervene and Answer of CAUSE-PA, Comments of CAUSE-PA, and Reply Comments of CAUSE-PA, Docket No. P-2016-2579249 (filed Jan. 27, 2017, Jan. 23, 2017, and Feb. 22, 2017, respectfully); Petition of NRG Energy, Inc. for Implementation of Electric Generation Supplier Consolidated Billing, Comments of TURN et al. and Reply Comments of TURN et al., Docket No. P-2016-2579249 (Jan. 23, 2017 and Feb. 22, 2017, respectfully).

*i. Supplier Consolidated Billing is inconsistent with the mandates of the Electric Generation Customer Choice Act contained in Chapter 28 of the Public Utility Code.*⁸

SCB directly conflicts with explicit provisions of the Electric Generation Customer Choice Act (Choice Act), which requires electric distribution companies (EDCs) to continue performing essential consumer service functions, including billing services. Moreover, SCB would undercut the Commission's obligation under the Choice Act to ensure that universal service programming is cost-effective, available, and adequately funded to ensure that all consumers, regardless of income, are able to access affordable utility services.⁹ Approval of SCB would, thus, violate multiple provisions of the Choice Act.

First, section 2807(c) speaks directly to the respective billing obligations of EDCs, compared to those of suppliers. While the provision allows for separate (dual) billing, wherein a consumer could choose to receive a bill from both their supplier and their EDC, it otherwise allows EDCs to provide UCB when a consumer does not otherwise elect to receive a dual bill:

Customer billing. – Subject to the right of an end-use customer to choose to receive separate bills from its electric generation supplier, the electric distribution company may be responsible for billing customer for all electric services, consistent with the regulations of the commission, regardless of the identity of the provider of those services.¹⁰

Importantly, use of the term “may” in this section *does not* grant implicit authority for suppliers to also perform consolidated billing functions. Indeed, the section only contemplates two forms of billing: dual billing or UCB. If the legislature intended to allow suppliers to bill for EDC services,

⁸ 66 Pa. C.S. §§ 2801 *et seq.*

⁹ See 66 Pa. C.S. §§ 2802, 2804, 2807(c)-(d)

¹⁰ 66 Pa. C.S. § 2807(c). In addition, the subsections that follow this mandate set forth other required attributions of customer billing, including mandatory unbundling of all charges: “Customer bills shall contain unbundled charges sufficient to enable the customer to determine the basis for those charges.” 66 Pa. C.S. § 2807(c)(1). As discussed below in subsections A.ii and A.iii, Chapter 14 only applies to “public utilities” – which includes EDCs, but excludes suppliers. Thus, if SCB were to proceed, the Commission would be without authority or oversight to regulate consumer billing to ensure that rates and charges are not bundled.

it could have done so. It did not. Instead, the legislature set forth additional requirements for UCB, including a requirement that if services are provided by an entity other than the EDC, that entity “shall furnish to the electric distribution company billing data sufficient to enable the electric distribution company to bill customers.”¹¹ Again, if the legislature intended to facilitate or otherwise authorize SCB, it could have done so by imposing the same requirement on the EDC to provide billing data to suppliers. The absence of such authority indicates the legislature neither contemplated nor authorized SCB.

The very next provision of the Choice Act – section 2807(d) – further eliminates any doubt about whether SCB may be implicitly authorized under section 2807(c). Indeed, all consumer service functions – which necessarily includes billing, collections, and termination functions – are expressly delegated to EDCs in Section 2807(d):

Consumer protections and customer service. – **The electric distribution company shall continue to provide customer service functions consistent with the regulations of the commission, including meter reading, complaint resolution and collections. Customer services shall, at a minimum, be maintained at the same level of quality under retail competition.**

- (1) The commission shall establish regulations to ensure that an electric company does not change a customer’s electricity supplier without direct oral confirmation from the customer of record or written evidence of the customer’s consent to a change of supplier.
- (2) The commission shall establish regulations to require each electric distribution company, electricity supplier, marketer, aggregator and broker to provide adequate and informed choices regarding the purchase of all electricity services offered by that provider. Information shall be provided to consumers in an understandable format that enables consumers to compare prices and services on a uniform basis.
- (3) Prior to the implementation of any restructuring plan under section 2806 (relating to implementation, pilot programs and performance-based rates), each electric distribution company, in conjunction with the commission, shall implement a consumer education program informing

¹¹ 66 Pa. C.S. § 2807(c)(2).

customers of the changes in the electric utility industry. The program shall provide consumers with information necessary to help them make appropriate choices as to their electric service. The education program shall be subject to the approval by the commission.¹²

These detailed legislative provisions impose a host of very specific obligations on EDCs for billing, education, and other responsibilities to ensure that customers are well informed about the competitive market, but they are silent about similar obligations of suppliers. This silence is telling: EDCs must continue to perform the consumer functions inherent to the billing entity, and the legislature did not contemplate a paradigm which would authorize suppliers to conduct the sensitive functions of billing, collections, and terminations.

Furthermore, section 2807(f) imposes a host of “consumer service functions” of the EDC that are not readily severable from billing functions from the “consumer service functions” otherwise contemplated to remain with the EDC. Consumers naturally contact the billing agent with a broad range of problems, including service quality, charges, collections efforts, privacy concerns, meter issues, termination, and other critical questions or issues a consumer may experience with regard to their utility service. If an EDC were to continue performing all “consumer service functions” – without also fulfilling the billing function – consumers would experience a great deal of confusion, having to overcome significant and frustrating obstacles to reach a resolution of their issues. For example, if a consumer received a termination notice from their EDC, and first contacted their supplier because it is the company who bills them for service, the consumer would be told they must contact the EDC to address the termination issue – adding significant time and frustration to the consumer seeking resolution of a potentially life-threatening termination of utility service.¹³ Such a result would appear to directly violate section

¹² 66 Pa. C.S. § 2807(d) (emphasis added).

¹³ Of course, suppliers are not required to report on or comply with call and response times or dispute handling functions, so their initial call to the supplier could be quite long and protracted.

2807(f), which requires that all consumer service functions “be maintained at the same level of quality under retail competition.”¹⁴

As a matter of statutory construction, the language of the Choice Act is clear and unambiguous, and must be implemented in accordance with this plain meaning.¹⁵ That said, were an ambiguity to arise, the legislative history affirms the General Assembly’s intention that traditional utility customer service functions – including billing - continue to be exercised exclusively by the EDC. When the Choice Act was initially passed, the discussion on the House floor clearly evidenced an intent to require that EDCs – not suppliers – perform all consumer service functions, including billing:

Mr. THOMAS. Thank you. Now, if we can turn to that section on consumer protections, section 2807. You had mentioned earlier that this bill provides the same myriad of protections that exist in the current law. This section seems to imply that there are changes being made to the traditional obligation which existed between utility companies and the customer. Is that correct, or am I interpreting this wrong?

Mrs. DURHAM. The same protections are still in the bill; that is correct.

Mr. THOMAS. So I should not give any credence to this language which says that the traditional obligations are being changed?

Mrs. DURHAM. Mr. Speaker, could you give me specifically the line and page you are referring to?

Mr. THOMAS. Well, I am reading from, I guess, the analysis or out of the pre-session report, and it says that section 2807 changes the traditional obligation-to-serve requirement to an obligation to deliver for the electric distribution companies, and it talks about a modified obligation.

Mrs. DURHAM. Mr. Speaker, the difference is, you are going to have generation and you are going to have transmission and distribution. The consumer will be dealing directly with the transmission and distribution, and that stays the same, and that is also still regulated. And the duty to serve is still there.

Mr. THOMAS. Thank you.¹⁶

¹⁴ 66 Pa. C.S. § 2807(d).

¹⁵ 1 Pa. C.S §1921(b).

¹⁶ Pa. House Journal, at 2566 (November 25, 1996).

This legislative history demonstrates the intention of the General Assembly to maintain the paradigm wherein the consumer deals “directly” with the EDC, and the EDC continues to uphold its obligations to perform all consumer services functions, including billing.

Finally, as explored more thoroughly below in section B.ii., SCB is inconsistent with the universal service requirements of the Choice Act, and would erode the stability, effectiveness, availability, and cost-effectiveness of universal service programs. The Choice Act, in relevant part, explicitly provides:

Electric service is essential to the health and well-being of residents, to public safety and to orderly economic development, and electric service should be available to all customers on reasonable terms and conditions.¹⁷

The Commonwealth must, at a minimum, continue the protections, policies and services that now assist customers who are low-income to afford electric service.¹⁸

There are certain public purpose costs, including programs for low-income assistance ... which have been implemented and supported by public utilities’ bundled rates. **The public purpose is to be promoted by continuing universal service and energy conservation policies, protections and services,** and full recovery of such costs is to be permitted through a nonbypassable rate mechanism.¹⁹

Programs under this paragraph shall be subject to the administrative oversight of the commission which will ensure that the programs are operated in a cost-effective manner.²⁰

SCB is incompatible with federal and utility universal service programs, and the Commission’s regulations and policies which implement these programs to assist low income households. As addressed in full below, since SCB would erode the accessibility, cost-effectiveness, and funding

¹⁷ 66 Pa. C.S. § 2802(9).

¹⁸ 66 Pa. C.S. § 2802(10) (emphasis added).

¹⁹ 66 Pa. C.S. § 2802(17) (emphasis added).

²⁰ 66 Pa. C.S. § 2804(9).

for universal services and other low-income energy assistance programs, it directly contradicts the provisions of the Choice Act outlined above.

As discussed in further detail in subsection A.iii, the Commission may not delegate the EDC's explicit duties under the Choice Act to a supplier. Doing so would be outside of the Commission's express authority to implement the requirements of the Choice Act, and such an interpretation would not be subject to deference by the Commonwealth Court.

- ii. Suppliers are not subject to the critical billing, collections, and termination standards contained in Chapter 14 of the Public Utility Code and Chapter 56 of the Commission's regulations.*

Not only does SCB directly conflict with the Choice Act, it also conflicts with critical billing, collections, and termination standards contained in Chapter 14 of the Public Utility Code and Chapter 56 of the Commission's regulations. Under current law, suppliers are not subject to the requirements contained in Chapters 14 and 56. Importantly, as discussed in subsection A.iii below, the Commission cannot cure these legal defects by waiving or otherwise delegating those requirements to suppliers to allow for SCB.

Chapter 14 of the Public Utility Code and Chapter 56 of the Commission's regulations apply only and explicitly to public utilities, not suppliers.²¹ Chapter 14 defines a public utility as:

“Public utility.” Any electric distribution utility, natural gas distribution utility, small natural gas distribution utility, steam heat utility, wastewater utility or water distribution utility in the Commonwealth that is within the jurisdiction of the Pennsylvania Public Utility Commission.²²

Chapter 56 defines a public utility as: “An electric distribution utility, natural gas distribution utility or water distribution utility in this Commonwealth that is within the jurisdiction of the

²¹ 66 Pa. C.S. § 1401 (“This chapter relates to protecting responsible customers of **public utilities**.” (emphasis added)).

²² 66 Pa. C.S. § 1403.

Commission.”²³ The definition contemplates two criteria: (1) that the public utility is a distribution utility, and (2) that a public utility fall within the jurisdiction of the PUC. Suppliers meet neither of those provisions.

Every crucial provision of Chapter 14, and consequently of Chapter 56, is expressly applied to **public utilities**, including:

- Cash Deposits²⁴
- Payment Arrangements²⁵
- Termination of Service²⁶
- Winter Protections²⁷
- Medical Protections²⁸
- Reconnection of Service²⁹
- Surcharge Prohibitions³⁰
- Late Payment Fee Rules³¹
- Consumer Complaint Procedures³²
- Universal Service Referrals³³
- Automatic Meter Reading³⁴
- Reporting Requirements³⁵
- Protections for Victims of Domestic Violence³⁶

These provisions each describe, in detail, the duties, prohibitions, responsibilities, and requirements which apply explicitly – by name – to “public utilities,” not suppliers.

Important to this analysis is the fact that Chapter 14 makes reference to suppliers.³⁷ Thus, the legislature clearly contemplated the competitive market – and suppliers’ role in that market –

²³ 52 Pa. Code § 56.2.

²⁴ 66 Pa. C.S. §§ 1404, 1404(a.1).

²⁵ 66 Pa. C.S. § 1405.

²⁶ 66 Pa. C.S. § 1406.

²⁷ 66 Pa. C.S. § 1406(e).

²⁸ 66 Pa. C.S. § 1406(f).

²⁹ 66 Pa. C.S. 1407(a)-(b).

³⁰ 66 Pa. C.S. § 1408.

³¹ 66 Pa. C.S. § 1409.

³² 66 Pa. C.S. § 1410.

³³ 66 Pa. C.S. § 1410.1.

³⁴ 66 Pa. C.S. § 1411.

³⁵ 66 Pa. C.S. § 1415.

³⁶ 66 Pa. C.S. § 1417; see also 56 Pa. Code Ch. 56, Subchapters L-V.

³⁷ See, e.g., 66 Pa. C.S. § 1403.

in passing Chapter 14, and understood that it could assign the duties therein to suppliers, but nevertheless declined to extend the Chapter to either allow or require suppliers to conduct the sensitive and high-stakes operations of billing, collections, and termination of residential utility consumers.³⁸ As explained in subsection A.iii, this fact is instructive, and prevents the Commission from delegating to suppliers the express duties of the public utilities mandated by Chapter 14.

It would not be appropriate for suppliers to simply refer consumers to call their public utility to address matters covered in Chapter 14. Billing is not a stand-alone consumer function, and cannot be excised from the billing, collections, and termination standards in Chapter 14.

Take, for example, a consumer who is experiencing difficulty making full payment on a SCB. That consumer would naturally call the supplier first in an attempt to work out a resolution because the supplier is the entity listed on their bill. Suppliers' call centers are unregulated, and are not subject to the Commission's quality of service benchmarks and standards or other quality control provisions.³⁹ In fact, there is nothing to prohibit suppliers from taking actions directly contrary to the Commission's standards, failing to appropriately track and survey customer contacts or utilizing the call center to market ancillary goods or services, or otherwise impede in resolution of customer concerns. Under current law, public utilities are required to offer reasonable payment terms to a customer and to refer economically vulnerable customers to universal service programs.⁴⁰ Suppliers have no such obligation. Thus, after facing inadequate and/or inconsistent

³⁸ 66 Pa. C.S. § 1403.

³⁹ See 52 Pa. Code §§ 54-151-.156; see also Pa. PUC, BCS, 2016 Customer Service Performance Report (Aug. 2017), http://www.puc.state.pa.us/General/publications_reports/pdf/Customer_Service_Perform_Rpt2016.pdf. Section 54.151 specifically provides that the purpose of the regulations is to "develop uniform measurement and reporting to assure that the customer services of the EDCs are maintained, at a minimum, at the same level of quality under retail competition." 52 Pa. Code § 54.151 (emphasis added).

⁴⁰ 66 Pa C.S. § 1401.1

customer service, as well as potentially lengthy call wait times, the financially vulnerable consumer may or may not be told to contact the public utility or appropriately advised regarding the availability of dispute procedures under the Commission's regulations. Ultimately, such customer may or may not find an appropriate resolution of their issue with a supplier, and may never be effectively directed under Commission regulations.

Ultimately, if the consumer is not appropriately referred, the public utility would be unable to fulfill its Chapter 14 duties, which include the duty to refer payment troubled consumers to universal service programs and to attempt to collect on debt.⁴¹ Similarly, a customer with grounds for a dispute or complaint may never receive notification of their rights from a supplier.⁴² Under SCB, who would bear the responsibility if a consumer's service is unjustly terminated? If a consumer is never referred to the public utility, would the public utility nonetheless be responsible for failure to fulfill Chapter 14 requirements, such as the winter moratorium and the protections for victims of domestic violence and medically vulnerable households? Absent a statutory scheme imposing clear legal responsibility on suppliers, and vesting the Commission with adequate enforcement authority, SCB creates a clear risk that consumers would suffer irreparable losses, without notice and opportunity to avoid the risks. Even if the consumer were properly referred to the public utility, their added time, energy, and potential expenditures to address their payment issue represent unavoidable harms resulting from SCB. Time away from work during business hours can be especially challenging for low wage and hourly employees, who are often prohibited or constrained from making calls during work hours. Low income consumers, who are far more

⁴¹ See *id.*

⁴² Cf. 52 Pa. Code §56.97(b)(1) (requiring notice of dispute rights and complaint procedures to be provided by public utilities).

likely to experience payment issues,⁴³ frequently lack access to stable telecommunications services, making multiple calls and potentially long wait times of particular concern. Indeed, under an SCB paradigm, by the time a consumer reaches the public utility to address their payment issue, the consumer's service may be subject to termination.

Policy considerations, such as the broader impact of SCB on low income and vulnerable Pennsylvanians, are discussed in greater detail in Section B. Suffice to say, the implementation of SCB in Pennsylvania would weaken the ability of public utilities to comply with Chapter 14 and would undermine the effectiveness of consumer protections contained therein, causing significant and substantial harm to consumers.

Chapter 14 – which governs the billing, collections, and termination standards, does not extend to suppliers. As such, absent clear legislative authorization and specific Commission enforcement authority, SCB must fail. As discussed in further detail in subsection iii, the Commission may not delegate the explicit duties of public utilities to a supplier. Doing so would contravene the Commission's express obligations to implement the requirements of Chapter 14.

iii. The Commission is obligated to ensure that the requirements contained in the Public Utility Code are fulfilled by public utilities, which it cannot do by delegating those requirements to suppliers.

As discussed at length above, Chapters 28 and 14 of the Public Utility Code impose unambiguous duties, obligations, and requirements directly on public utilities. Implementation of SCB would interrupt and/or usurp those obligations for reasons unsupported by sound utility

⁴³ **Approximately 57% of payment-troubled residential electric consumers and 75% of payment-troubled natural gas customers are classified as “confirmed low income” (verified income which does not exceed 150% of the Federal Poverty Level). See Pa. PUC, BCS, 2016 Report on Universal Service Programs & Collections Performance, at 8-9 (Oct. 2017). These percentages are likely much higher, given the significant disparity between the estimated low income population and the confirmed low income population. *Id.* at 6-8. Utilities generally require a household to have recently submitted verified income documentation to be classified as “confirmed low income.”**

policy. Indeed, the obligations imposed in Chapters 28 and 14 are not waivable – nor are they discretionary.

Proponents of SCB may nonetheless argue that the Commission may authorize a supplier to act in some expanded capacity as the party responsible for directly billing EDC service, so long as it ensures that **someone** satisfies the requirements imposed on EDCs through these enactments. The hypothetical argument that suppliers could be substituted for an EDC for purpose of meeting the statutory obligations imposed by the Public Utility Code is without merit and is inconsistent with closely analogous recent precedent from the Commonwealth Court.

In Section 4 of Act 201 of 2014 (the legislative Act which promulgated Chapter 14), the legislature explicitly declared that Chapter 14 supersedes inconsistent laws: “The addition of 66 Pa.C.S. Ch. 14 **supersedes any inconsistent requirements imposed by law** on public utilities.”⁴⁴ Section 6 then sets forth the parameters of Commission authority to implement the rigorous requirements of Chapter 14:

Section 6. The Pennsylvania Public Utility Commission shall amend the provisions of 52 Pa. Code Ch. 56 to comply with the provisions of 66 Pa. C.S. Ch. 14 and may promulgate other regulations to administer and enforce 66 Pa. C.S. Ch. 14, **but the promulgation of any such regulation shall not act to delay the implementation or effectiveness of this chapter.**⁴⁵

As established above, SCB is inconsistent with the requirements of Chapter 14 of the Public Utility Code and Chapter 56 of the Commission’s regulations, and would diminish the effectiveness of the provisions contained therein – in direct violation of the authorizing and implementation language in Sections 4 and 6 of Act 201 of 2004.

⁴⁴ Act 201 of 2004, PL 1578, Section 4(1),

<http://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2004&sessInd=0&act=201>.

⁴⁵ Act 201 of 2004, PL 1578, Section 6,

<http://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2004&sessInd=0&act=201>.

First, to the extent an EGS contract for SCB would require a customer to agree to allow a supplier to fulfill the requirements of Chapter 14, and effectively waive the imposition of those requirements on the public utility, such waiver would be void. It is well established that “a statutory right conferred on a private party, but affecting the public interest, may not be waived or released if such waiver or release contravenes the statutory policy.”⁴⁶ As discussed in greater detail throughout these Comments, waiver of a consumer’s statutory rights would directly contravene the express goals of Chapter 14 (i.e., to impose equitable rules for consumer billing, collection, and termination procedures) by allowing suppliers to impose inconsistent and/or impermissible rules and standards without any accountability.⁴⁷ Without continued and full effectiveness of the consumer protections contained in Chapter 14, individual consumers, their families, and the surrounding community would experience substantial harm. Such a result would contradict the Commission’s regulatory authority set forth in Chapter 14, which constrains the Commission to implement and effectuate the requirements of Chapter 14.⁴⁸

Similarly, there is no authority on which the Commission could rely to permit the delegation of the requirements of Chapter 14 from public utilities (here, EDCs) to suppliers. The Commonwealth Court recently examined an analogous proposal, which proposed to delegate the statutory obligation of a public utility to offer Time of Use rates, pursuant to the Choice Act, to a supplier.⁴⁹ Weighing this proposal against the clear statutory language of the Choice Act, the Commonwealth Court struck down a proposal that would effectively substitute an EGS for an EDC for purposes of fulfilling the provisions Time of Use provisions of the Choice Act. In *Dauphin*

⁴⁶ See *Brooklyn Sav. Bank v. O’Neil*, 324 U.S. 697, 704 (1945).

⁴⁷ 66 Pa. C.S. § 1402 (Declaration of Policy.)

⁴⁸ *Id.*

⁴⁹ *Dauphin County Indust. Dev. Auth. v. Pa. PUC*, 123 A.3d 1124, 1134-35 (Pa. Commw. Ct. 2015), *appeal denied* 140 A.3d 13 (Pa. 2016).

County Industrial Development Authority v. Pa. PUC, the Commonwealth Court held that the Commission is not entitled to “substitute” an unregulated entity for a regulated entity. The statutory requirement imposed on the regulated entity is non-transferrable:

The Commission’s interpretation of Section 2807(f) is not entitled to deference. Unlike the statute at issue in *Popowsky*, there is no ambiguity in the Competition Act’s mandate. ... Our rules of statutory construction require that words and phrases be read according to their common and approved usages. 1 Pa. C.S. §1903(a). The legislature’s unqualified use of the words “shall offer” in Section 2807(f)(5) places the burden on the default service provider, in this case PPL, to offer Time-of-Use rates to customer-generators. **The legislature knows the difference between a default service provider and an Electric Generation Supplier. Its decision to place the onus on default service providers was neither accidental nor arbitrary.**⁵⁰

Here, there is likewise no ambiguity with regard to which entity bears the responsibilities of compliance with Chapter 14: Each provision explicitly and unambiguously applies to “public utilities,” not suppliers. The same is true for Chapter 28, which imposes on EDCs the duty to “provide customer service functions consistent with the regulations of the commission.”⁵¹ As in *Dauphin County Industrial Development Authority*, the legislature’s “decision to place the onus” on public utilities “was neither accidental nor arbitrary,”⁵² and any action by the Commission to delegate those duties to suppliers – voluntarily or otherwise – is not entitled to deference.

It would also be unworkable to approve SCB based on a suppliers’ assertion of voluntary compliance with the requirements of Chapters 14. While certain suppliers may willingly offer to voluntarily comply with these rules in exchange for the Commission’s blessing to implement SCB, voluntary compliance would present a thorny issue if a supplier’s compliance was called into question in a complaint by a consumer or the Commission’s Bureau of Investigation and Enforcement. It is a dubious conclusion that the Commission would have authority to fully enforce

⁵⁰ Id.

⁵¹ 66 Pa. C.S. § 2807(d).

⁵² Id.

these provisions against a group of suppliers who volunteer to follow the rules, but are not governed by the applicable statute.

Chapter 14 was most recently updated, amended, and reauthorized less than four years ago, in December 2014. If the legislature had intended to allow suppliers to conduct billing, collections, and/or termination functions, it certainly could have amended Chapter 14 to do so. It did not. The Commission may not now – just over three years after the legislature reauthorized Chapter 14 – implement regulatory approval measures which would substitute suppliers for public utilities where such substitution is without any legal basis under Chapters 14 and 28. Under the current legislative paradigm contained in Chapters 14 and 28 of the Public Utility Code, SCB simply does not conform. The Commission may not use its power to otherwise delegate the responsibilities of EDCs to unregulated suppliers, nor may it in any way authorize the substitution of an unregulated party for a regulated party for purposes of satisfying statutory mandates. As such, the Commission must reject SCB.

B. Supplier Consolidated Billing is not in the public interest.

As argued above, SCB is not permissible under Pennsylvania law. That said, even if it were permissible, SCB is not in the public interest because it would be harmful to low and moderate income families in Pennsylvania who already struggle to keep service connected under the current paradigm of public utility billing, collection, and termination standards, and would further impede efforts to implement effective universal service programming capable of ensuring energy affordability. Moreover, if authorized, SCB would blur the demarcation of responsibility between public utilities and suppliers, leading to significant confusion and potentially wide-spread

abuses. Ultimately, SCB would harm the competitive market and consumers alike – at a great cost to all ratepayers⁵³ – and should not be authorized in Pennsylvania.

i. Supplier Consolidated Billing harms competition.

As the Commission noted in its End State Final Order, “[i]t is unclear how many suppliers would be willing to forgo the ease and convenience of utility consolidated billing under POR, where they have no bad debt risk, to opt to an SCB model where they assume the full burden of billing, collections and bad debt.”⁵⁴ Indeed, smaller suppliers likely do not have the internal capacity to offer SCB, and have raised concerns that SCB would harm competition.⁵⁵

Proponents of SCB may seek to fundamentally change how charges to customers are presented in bills and other notices, obscuring important information about the price of service customers are charged. For example, NRG made this concern clear in its 2016 Petition, seeking permission for a number of anti-competitive conventions.⁵⁶ In its Petition, NRG requested to consolidate EDC charges in its bill presentment, thereby obscuring the price to compare by charging a single, undesignated cost for distribution and generation costs.⁵⁷ This would complicate the ability for a consumer to freely choose a new supplier, and obfuscates the ability of the consumer to compare supplier’s terms against the price to compare or other offers in the competitive market. Similarly, in an attempt to ease specific concerns about the continued ability for consumers to access reasonable payment arrangements, as required by Chapter 14, NRG proposed that suppliers offering SCB be allowed to implement a blocking mechanism, which

⁵³ The many and varied costs associated with SCB is discussed in Section C.

⁵⁴ Investigation of Pennsylvania’s Retail Electricity Market: End State of Default Service, Final Order, Docket No. I-2011-2237952, at 67-68 (Feb. 14, 2013) (hereinafter End State Final Order).

⁵⁵ See Petition of NRG Energy, Inc. for Implementation of Electric Generation Supplier Consolidated Billing, Answer and Comments of Calpine Energy Solutions, LLC, Docket No. P-2016-2579249 (filed Jan. 23, 2017).

⁵⁶ See Petition of NRG Energy, Inc. for Implementation of Electric Generation Supplier Consolidated Billing, at paras. 31, 37, 48-50, Docket No. P-2016-2579249 (filed Dec. 8, 2016).

⁵⁷ See id. at para. 48

would prevent those with a supplier-provided payment arrangement from switching to a new supplier until the terms of the payment arrangement are fulfilled.⁵⁸ Such a move would hold the consumer captive at a potentially unaffordable rate. Calpine Energy Solutions, LLC – a prominent Pennsylvania supplier – noted in response to NRG’s proposal to implement a blocking mechanism that “[h]olding a retail customer hostage until the customer has paid his or her past due bill in full circumvents and ignores existing market structures, shifts the risk to Pennsylvania consumers, and is the antithesis of competition.”⁵⁹

The Commission is currently engaged in a rulemaking to tighten supplier marketing regulations, and allow consumers to conduct a true rate comparison – including all applicable fees and service costs.⁶⁰ These efforts have become increasingly necessary to allow consumers to reasonably assess competitive offers in light of widespread and well-documented pricing abuses, which have led to undeniable confusion and dissatisfaction with the marketplace.⁶¹ Authorizing SCB would enlarge those abusive practices, allowing suppliers to obfuscate their prices, hide the price-to-compare, and otherwise make it difficult for consumers to assess offers.

⁵⁸ See *id.* at para. 37(e).

⁵⁹ Petition of NRG Energy, Inc. for Implementation of Electric Generation Supplier Consolidated Billing, Answer and Comments of Calpine Energy Solutions, LLC, Docket No. P-2016-2579249, at 7 (filed Jan. 23, 2017).

⁶⁰ See Rulemaking Regarding Electricity Generation Customer Choice, 52 Pa. Code Chapter 54, Notice of Proposed Rulemaking Order, Docket No. L-2017-2628991 (order entered Dec. 7, 2017).

⁶¹ A recent Public Input Hearing, held as part of the First Energy Companies’ current Default Service Proceeding, is instructive of the widespread negative shopping experiences. In that proceeding, about 350 consumers attended the hearing, 66 of whom testified under oath. All of the testifiers expressed outrage at a proposal to add a fee to default service to coerce customers to shop, and most shared personal stories about their negative experiences in the market. See Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company for Approval of their Default Service Programs, Docket Nos. P-2017-2637855 *et al.*, Public Input Hearing Tr. pp. 63-306. Of course, several recent lawsuits against a number of competitive suppliers over marketing abuses are also instructive. See Alex Wolf, Law 360, Respond Power Pays \$5.2M to Settle Pa. Price Spike Suits (Aug. 11, 2016), <https://www.law360.com/articles/827574/respond-power-pays-5-2m-to-settle-pa-price-spike-suits>; Emily Field, Law 360, HIKO Energy Paying \$1.6M to End Pa. Price Spike Suit (May 4, 2015), <https://www.law360.com/articles/651172/hiko-energy-paying-1-6m-to-end-pa-price-spike-suit>; Emily Field, Law 360, Pa. Utility to Pay \$2.3M to End Price Spike Suit (March 25, 2015), <https://www.law360.com/articles/635486/pa-utility-to-pay-2-3m-to-end-price-spike-suit>.

In the past, suppliers have argued that they would like SCB in order to bill and market so called “value added” services to the bills of utility customers. While there may be a segment of the population who wish to be billed for unrelated products on their utility bill,⁶² this in and of itself is **not** a reason for the Commission to authorize SCB.

The stated purpose of the Choice Act is “to create direct access by retail customers to the competitive market for the *generation of electricity*.”⁶³ Indeed, the primary legislative purpose was to permit competitive forces to effectively control “*the cost of generating electricity*,” for the benefit of all customer classes, while ensuring that such service (essential to the health and well-being of residents) remains available to all customers on reasonable terms and conditions.⁶⁴ On the other hand, there is no mention of “value added” services anywhere in the Choice Act.

The non-commodity products and services often referenced by those who support SCB are not related to the generation of electricity, and are therefore not a part of the competitive market for retail electric supply authorized by the Choice Act. These charges drive up the cost of utility service, and – as discussed in section B.ii – work to diminish the effectiveness of critical universal service programming. Any concern about the ability to bill for these services on a consumer’s consolidated bill is without legislative foundation in the Choice Act and has no bearing on electric generation choice and competition. The goal of the Choice Act is to drive financial savings for electric service – not to facilitate the sale of unrelated products and services, such as thermostats, security systems, and HVAC systems.

⁶² It should be noted that, prior to proceeding with consideration of SCB, the Commission should determine whether there is sufficient interest from consumers to justify the substantial costs. See below, section C, regarding the costs associated with SCB, and section D, which discusses the need to fully investigate and assess those costs.

⁶³ 66 Pa. C.S. § 2802(12).

⁶⁴ 66 Pa. C.S. § 2802(5), (9), (10), (12).

ii. Supplier Consolidated Billing is incompatible with critical utility assistance programming for low income households.

The structure of SCB is incompatible with critical universal service programming, and directly contradicts the obligations of public utilities and the Commission to ensure that such programming is cost-effective, available, and adequately funded to ensure that all Pennsylvanians can afford basic utility services. Adding yet another intermediary between the needy household and available assistance programs would delay or otherwise deter enrollment, leading to deeper affordability issues across the state. Importantly, it would be insufficient to merely carve out low income populations, using proxies such as confirmed low income status or existing enrollment in a utility assistance program. Indeed, SCB must be rejected to avoid significant and compounded harm to low income populations.

1) The Low Income Home Energy Assistance Program

SCB is incompatible with the federal Low Income Home Energy Assistance Program (LIHEAP), which provides millions of dollars each year in emergency grant assistance to help vulnerable low income households to afford heat in the winter. The Pennsylvania Department of Human Services (DHS), which administers LIHEAP, explicitly prohibits suppliers from receiving LIHEAP grants.⁶⁵ The decision of DHS to exclude suppliers from receiving a grant is not merely

⁶⁵ LIHEAP is a federally funded block grant program administered on the Federal level by the United States Department of Health and Human Services Administration for Children and Families. In Pennsylvania, the block grant allocation is administered by the Pennsylvania Department of Human Services (DHS) pursuant to a State Plan that is submitted each year to HHS. The 2017-2018 LIHEAP State Plan submitted by DHS provides that LIHEAP grants will be paid directly to either the LIHEAP recipient's primary or secondary heating provider, so long as the provider is a licensed LIHEAP vendor. See Commonwealth of Pennsylvania, Low-Income Home Energy Assistance Program, Fiscal Year 2018 Final State Plan, (hereinafter 2018 LIHEAP State Plan), available at http://www.dhs.pa.gov/cs/groups/webcontent/documents/document/c_266106.pdf.

The 2018 LIHEAP State Plan defines "vendor" as:

An agent or company that directly distributes home-heating energy or service in exchange for payment. **The term does not include landlords, housing authorities, hotel managers or proprietors, rental agents, energy suppliers or generators,** or other parties who are not direct distributors of home-heating energy or service.

an oversight – it is an explicit expression of policy, which recognizes that *in light of restructuring*, and because EDCs “remain regulated” and subject to the winter moratorium, “[t]he interests of the Commonwealth’s low-income customers are best served and protected by sending the LIHEAP payment to the distribution companies.”⁶⁶ Given that suppliers are not regulated, and are not subject to the requirements of Chapter 14, it is not in the interest of the Commonwealth’s low income consumers to change these LIHEAP rules. As such, the implementation of SCB would complicate the ability of vulnerable low income households to receive assistance from LIHEAP to help afford essential utility service.

2) Customer Assistance Programs

SCB would diminish the cost-effectiveness, accessibility, and affordability of Customer Assistance Programs (CAPs). CAPs provide vulnerable low income consumers with a bill discount or credit and arrearage forgiveness, are paid for by residential consumers through a non-bypassable rate, and are structured and administered by EDCs subject to Commission oversight.⁶⁷ Each CAP is unique, with different calculations of benefits and different terms and conditions for enrollment. However, the same general statutory and regulatory mandates apply across the board. In short, Chapter 28 requires the Commission to ensure that universal services are accessible, cost-effective, and adequately funded to deliver affordable utility services to all

Under the restructuring statutes (66 Pa. C.S. § 2807, 66 Pa. C.S. § 2207), the distribution companies are the suppliers of last resort; they remain regulated, and must comply with the state’s winter termination rules in accordance with 66 Pa. C.S. § 1406(e). **The interests of the Commonwealth’s low-income customers are best served and protected by sending the LIHEAP payment to the distribution companies.**

Id. at Attachment B-3, § 601.3 (Definitions).

⁶⁶ *Id.*

⁶⁷ 66 Pa. C.S. §§ 2802(17), 2804(9); see also Retail Energy Supply Ass’n v. Pa. PUC, No. 230 C.D. 2017, at 24-25 (Pa. Commw. Ct. May 2, 2018).

those in need of assistance.⁶⁸ The Commission has an affirmative, statutory obligation to ensure that the level of assistance available to those in need is not diminished from levels available at the time of restructuring.⁶⁹

SCB would undermine the level of affordability produced by CAP because CAP calculations tend to use the Price to Compare to calculate CAP discounts or credits in an attempt to achieve an appropriate energy burden for the program participant, consistent with the Commission's CAP Policy Statement. This is logical as, unlike unregulated EGS-supply, default service is statutorily mandated to be provided at the least cost over time.⁷⁰ Substantial, long-term data in recent proceedings,⁷¹ as well recent research by the University of Pennsylvania,⁷² has shown that charges for competitive residential electric service most often exceed the Price to Compare – especially for low income consumers.⁷³ Those most in need of CAP to receive affordable bills are the same customers most likely to be harmed by higher prices for electricity in the competitive market. As the data bears out over a 52-month period, confirmed low income Pennsylvanians in the First Energy service territory alone were charged tens of millions of

⁶⁸ See *id.*

⁶⁹ 66 Pa. C.S. § 2802(10).

⁷⁰ 66 Pa. C.S. § 2807(e).

⁷¹ Retail Energy Supply Ass'n v. Pa. PUC, No. 230 C.D. 2017, at 36 (Pa. Commw. Ct. May 2, 2018) (“On the issue of harm, the evidence presented showed that between January 2012 and October 31, 2015, on average, nearly 10,000 CAP customers each month were paying above the PTC. These customers, together, were paying each month, on average, \$298,406 more than had they simply paid the PTC. Even when these overpaying CAP customers were considered together with those CAP customers who were paying below the PTC, the CAP was still more costly than the PUT, in an amount of \$228,656 each month, or more than \$2.7 million a year. This evidence was ‘unrefuted’. This data did not focus ‘on a simple point in time’[;] rather this data spanned 46 months. There is substantial evidence to support PUC’s finding this data demonstrated a pattern of a significant number of CAP customers overpaying for electricity.” (internal citations omitted)).

⁷² Christine Simeone & John Hanger, Kleinman Ctr. for Energy Policy, U. Penn, A Case Study of Electricity Competition Results in Pennsylvania (Oct. 28, 2016) (“During full implementation of restructuring (from 2011 to 2014), statewide average annual retail electricity rates to residential shopping customers were higher than utility default service rates.”).

⁷³ In the four First Energy service territories, over the course of 58 months, the net cost of CAP shopping was \$18,336,440 – paid by PCAP customers and other residential ratepayers who pay for the program. See Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co., and West Penn Power Co. for Approval of their Default Service Programs, Main Brief of CAUSE-PA, Docket Nos. P-2017-2637855, P-201702637857, P-2017-2637858, P-2017-2637866, at 29 (filed May 1, 2018).

dollars more than the price to compare.⁷⁴ SCB creates a pathway to enlarge this problem, not rectify it. As discussed above, SCB proponents may seek to mask the higher charges from EGSs by failing to provide contemporaneous and clear disclosure of the price-to-compare, and may attempt to re-bundle charges – making it difficult for consumers to compare. This essentially undermines the core universal service requirements of Chapter 28: That universal service programs, including CAP, be appropriately funded, cost-effective, and available in each electric distribution service territory.⁷⁵

Moreover, SCB would frustrate access to CAP because it would add yet another intermediary who is: unfamiliar with CAP; not required to be make referrals to CAP; and not knowledgeable about the nuances of CAP programs. Adding an intermediary would also interfere with the core universal service requirements of Chapter 28, which demand that universal service programming not be diminished. As noted above, in section A.i, Chapter 14 contains explicit obligations on public utilities to refer payment troubled consumers to available universal service programs. Even if suppliers were to voluntarily agree to provide appropriate referrals, the Commission lacks the enforcement/oversight authority to ensure that supplier

⁷⁴ In First Energy's service territory, shopping data showed that over a 52-month period, confirmed low income customers paid \$35.8 million more than they would have paid if they remained on default service. See Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co., and West Penn Power Co. for Approval of their Default Service Programs, CAUSE-PA St. 1, Docket Nos. P-2017-2637855, P-201702637857, P-2017-2637858, P-2017-2637866, at 26 n.41 (filed Feb. 22, 2018).

It bears noting that these confirmed low income customers are, themselves, not making out much better in the competitive market than the Companies' PCAP customers. In response to discovery requests, the Companies provided a chart showing the net impact of shopping for all confirmed low income customers for the same period In sum, the information shows that over a substantially similar period of time (52 months from August 2013 through December 2017 as compared to the 55 months from June 2013 through December 2014 information for PCAP customers), **the Companies' confirmed low income customers who shopped – on net – paid \$35,824,007 more than they would have paid had they remained on default service.** This amounts to \$8.2 million annually. While this also accounts for PCAP shopping over this period, it nonetheless shows the stark reality that the Companies' low income customers are not making out very well in the competitive electric market.

Id. (emphasis in original).

⁷⁵ 66 Pa. C.S. § 2804(9) (Standards for restructuring of electric industry).

screening and referrals meet the needs of this vulnerable population. There are ten separate CAP structures run by the EDCs and NGDCs in Pennsylvania, each with vastly different rules for eligibility, enrollment, and benefit structures. An untold number of suppliers would have to learn the nuances of each program, and make appropriate referrals. Indeed, SCB would undoubtedly erode the effectiveness of the referral requirements in Chapter 14 that connect eligible consumers with available assistance. Such a result is contrary to the requirements in Chapter 28, which mandates that universal service programs remain accessible, cost-effective, and adequately funded to serve all those in need.

Proponents of SCB often argue that SCB is necessary to allow suppliers to offer non-energy products and services. As discussed above in section B.i, the ability to bill for non-energy products is not a goal or requirement of the Choice Act, and is in fact contrary to the purpose of the Choice Act to reduce the cost of electric generation services in Pennsylvania. But in addition to this concern, the costs associated with non-energy services are particularly harmful to low income households, and should not be allowed to appear on a consolidated bill from either a supplier or the utility. Indeed, this “value added” argument is inconsistent with the Commission’s universal service requirements, particularly the Commission’s stated policy regarding Customer Assistance Programs. Allowing suppliers to offer other products and services, for which they directly bill customers through SCB, would harm vulnerable low income consumers, and may disrupt their eligibility for CAP. CAP bills are paid, in part, by other ratepayers and Commission policy prohibits those ratepayers who pay for CAP to subsidize nonessential products and services which have been shown to increase the commodity price for basic service. The Commission’s CAP Policy Statement explicitly prohibits CAP participants from subscribing to “nonbasic services that would cause an increase in monthly billing and

would not contribute to bill reduction.”⁷⁶ While the policy statement provides that nonbasic services may be allowed if the service *reduces* the customer’s bills, the statement unequivocally concludes by explaining that, even still, “CAP credits should not be used to pay for nonbasic services.”⁷⁷

In addition to contradicting codified Commission policy, the “value added” argument also runs afoul of the universal service provisions of the Choice Act, which require the Commission to administer universal service programs like CAP in a manner that is “cost-effective for CAP participants and non-CAP participants who share the financial consequences of the CAP participants’ EGS choice.”⁷⁸ In fact, in a decision issued just this week, on May 2, 2018, the Commonwealth Court explained that charging CAP customers for value added services “appear[s] to be inconsistent with the Choice Act.”⁷⁹

In short, the structure and implications of SCB are wholly incompatible with the statutory and regulatory requirements of CAP, and – thus – SCB should be rejected.

3) Hardship Fund Programs

In addition to undermining the effectiveness and availability of LIHEAP and CAP, SCB would also erode the Hardship Fund program, which provides emergency grant assistance to those

⁷⁶ 52 Pa. Code § 69.265(3)(ii).

⁷⁷ Id.

⁷⁸ Coalition for Affordable Util. Servs. & Energy Efficiency in Pa. et al. v. Pa. Pub. Util. Comm’n, 120 A.3d 1087, 1103 (Pa. Commw. Ct. 2015), appeal denied, 2016 WL 1383864 (Pa. Apr. 5, 2016) (hereinafter CAUSE-PA et al.).

⁷⁹ Retail Energy Supply Ass’n v. Pa. PUC, No. 230 C.D. 2017, at 26 fn. 29 (Pa. Commw. Ct. May 2, 2018).

RESA’s advocacy in favor of unregulated competition so that CAP customers can choose an EGS for reasons “[b]eyond lower pricing” arguably undercuts the Choice Act’s concern for accessible, affordable, and cost-effective electrical service for all Pennsylvanians. RESA would have CAP customers “leverage the power of the competitive market” so that they might obtain “loyalty discounts, reward points and gift cards offered through some EGS programs.” However, that leverage of power comes at a cost to non-CAP customers who would be paying even more in subsidies, were there no shopping restrictions, so that CAP customers might earn more reward points to use at a retailer or restaurant. The use of the CAP in this manner would appear to be inconsistent with the Choice Act.

Id.

facing financial hardships, such as job loss, domestic violence, divorce, death or serious illness, and other acute personal hardships. Hardship Fund grants are generally available to households with income up to 200% of the Federal Poverty Level, which helps to fill the gaps for families who are just over the line for eligibility in LIHEAP and CAP. Hardship Fund programs are financed through voluntary donations on customer bills, which are generally matched by the public utility's shareholder dollars.⁸⁰ In the 2015-2016 program year, EDCs collected over \$1.1 million in voluntary contributions, which was matched by \$1.6 million in shareholder contributions. These donations are then administered and distributed to those in need. Under SCB, donations to the Hardship Fund programs would necessarily diminish because it would remove SCB customers from the pool of voluntary contributors and eliminate the possibility of public utility shareholder matching contributions with respect to such customers.

4) The Low Income Usage Reduction Program

Enrollment in the Low Income Usage Reduction Program (LIURP) is also likely to be constrained. The EDC's ability to track and determine high users across its service territory would be difficult under an SCB paradigm, thereby impeding the ability for utilities to target appropriate households for usage remediation. Moreover, participation in LIURP is frequently linked to CAP participation, which - as discussed above - is impeded by SCB. Additionally, low income consumers are often hesitant to participate in LIURP because they do not fully understand the programming. The EDCs serve a vital role in educating customers about the benefits of LIURP, which is essential to the ability to deliver the necessary service provided by these EDC-administered programs. If there is a disconnect between the billing entity and the administrator of

⁸⁰ See Pa. PUC, BCS, 2016 Customer Service Performance Report, at 63 (Aug. 2017), http://www.puc.state.pa.us/General/publications_reports/pdf/Customer_Service_Perform_Rpt2016.pdf.

LIURP, this information gap is likely to grow, deterring vulnerable, high-use and low income consumers from receiving the critical benefits provided through the program.

5) The Customer Assistance Referral and Evaluation Program (CARES)

The primary purpose of the Customer Assistance Referral and Evaluation Program (CARES) “is to provide a cost-effective service that helps payment troubled customers maximize their ability to pay utility bills and maintain safe and adequate utility service.”⁸¹ CARES is administered by staff within the public utility to connect consumers with resources within their community that can help address financial instability:

A utility CARES representative performs the task of strengthening and maintaining a network of community organizations and government agencies that can provide services to the program clients. CARES staff conduct outreach and make referrals to programs that provide energy assistance grants, such as LIHEAP, hardship finds, and to other agencies that provide cash assistance. LIHEAP outreach and networking are vital pieces of CARES, especially when addressing important health and safety concerns relating to utility service.⁸²

Unlike public utilities, which have longstanding relationships with the community built over decades of service, suppliers often operate from out of state, and do not have the knowledge or relationships with the community to perform this critical function, which matches vulnerable consumers with available assistance in their community. If SCB were allowed to be implemented in Pennsylvania, it would further impede the ability of consumers facing unique and difficult hardships to address financial instability.

⁸¹ Id. at 61.

⁸² Id.

- 6) An exemption for universal service participants would be insufficient to ameliorate the potential harm to low income households which will likely be caused by Supplier Consolidated Billing.

It would be insufficient to merely exempt universal service participants from participating in SCB. Households often move in and out of eligibility for universal service programming, based on any number of personal circumstances. Consumers may experience periods of unemployment, unexpected medical expenses, death or illness of a wage earner, domestic violence, and other hardships which can disrupt the household's financial stability. If a consumer faces such a hardship, it is critically important that they be promptly referred to available assistance programs to stabilize the household's finances and avoid further accrual of uncollectible expenses. But as discussed above, SCB would diminish the effectiveness of low-income assistance programs, jeopardize affordability, and undermine referral obligations. Under the current paradigm, subject to rigorous oversight, CAP and LIHEAP reach only a fraction of the eligible population.⁸³ SCB would further obscure access to these programs, further diminishing universal service program enrollment. Such a result is contrary to the explicit requirements of the Chapter 28 and the goals of universal service programming to provide affordable utility service to all Pennsylvanians.

iii. Supplier Consolidated Billing would harm vulnerable residential ratepayers.

In addition to lacking necessary legal authorization for implementation pursuant to Public Utility Code Chapters 14 and 28, discussed in Section A above, SCB is also incompatible with the intent and purpose of the consumer protection provisions contained therein. SCB would not only cause customer confusion, particularly for low income households who more likely to experience payment trouble and threatened loss of service, it would also create an enforcement nightmare.

⁸³ *Id.* at 50. In 2016, CAP participation rate for electric customers as a percentage of confirmed low income customers, was approximately 47%. That number is much lower when looking at the estimated eligible population, which is based on census data – rather than on whether a customer recently verified their income with the utility by submitting income information. *See id.* at 7.

Expansion of Commission oversight to include oversight of supplier billing functions would either significantly increase rates⁸⁴ or vastly undermine enforcement of consumer protections. These results are unacceptable, and contrary to the public interest.

In a recent review of SCB, the Connecticut Public Utilities Regulatory Authority (PURA) concluded that shifting the billing responsibilities from EDCs to suppliers would “very likely increase customer confusion and decrease customer satisfaction.”⁸⁵ That same concern applies here, and is an especially salient concern for low income consumers. As explained above, low income consumers are more likely to experience payment troubles, and are thus more likely to contact their utility for assistance. This is the same population that is less able to contact their utility during business hours to address issues as they arise, either because they lack flexibility to make personal calls during work or they lack access to stable telecommunications service.

As it stands, the Commission expends a significant amount of resources (financed by the Commonwealth’s ratepayers) to ensure that the regulated public utilities in Pennsylvania are fully compliant with the standards in Chapters 14 and 56.⁸⁶ But there are hundreds of suppliers operating in Pennsylvania. The resources necessary to effectively oversee each supplier’s separate billing operations would require significantly more resources with no material benefit. This means means that enforcement would either be inadequate or significant increased costs would be generated, which would inevitably increase customer rates. Neither result would be just or reasonable.

⁸⁴ The costs associated with SCB are discussed in further detail in Section C. A significant factor in assessing the total costs of SCB is the cost of expanded oversight of suppliers, including assessments for both the Commission and the statutory advocates.

⁸⁵ Decision in the Matter of PURA Review of Billing of All Components of Electric Service by Electric Suppliers, PURA Docket No. 13-08-15, at 6 (Aug. 6, 2014).

⁸⁶ In 2017, the Bureau of Consumer Services fielded 12,509 complaints, received 46,124 requests for payment arrangements, and 25,095 inquiries from residential consumers. Pa. PUC, BCS, Quarterly Update to UCARE Report, January – December 2017, at 4 (2018), http://www.puc.state.pa.us/General/publications_reports/pdf/UCARE_2017-4Q.pdf.

Full and proper implementation and enforcement of the consumer protections contained in Chapters 14 and 56 is an ongoing and labor-intensive process, which requires training and retraining of utility staff, and constant course correction through the investigation of complaints fielded by the Commission's Bureau of Consumer Services and adjudication before the Commission's Administrative Law Judges.

In the Commission's End State of Default Service Investigation in 2012, and again in response to the NRG's Petition for Implementation of Electric Generation Supplier Consolidated Billing, the Pennsylvania Coalition Against Domestic Violence highlighted the severity of significant additional oversight obligations, and the likely impact on vulnerable populations and the service providers who assist those most in need:

As a practical matter, as noted in our prior comments, full implementation of the domestic violence protections in Chapter 14 and 56 has been difficult across the seven regulated electric utilities in Pennsylvania.

PCADV and its member programs have had difficulty in getting the incumbent EDCs to become familiar with the fact that Chapter 56 has a different set of rules for victims of domestic violence with a protection order. This educational gap has caused for many local domestic violence programs to expend a tremendous amount of staff time and resources to advocate on behalf of victims of domestic violence to obtain the protections to which they are statutorily entitled.

As we explained before: 'If it is hard to get seven EDCs who are closely regulated by the Commission to recognize these realities, getting the hundred plus licensed suppliers to comply with the provisions in Chapter 56, including those provisions that are applicable to survivors of domestic violence, will be nearly impossible.'⁸⁷

Impediments to enforcement of the critical consumer protections against the loss of utility services is not only harmful to the individuals, it is also harmful to the community as a whole. Households that cannot easily access assistance to pay their bill often suffer health consequences,

⁸⁷ Petition of NRG Energy, Inc. for Implementation of Electric Generation Supplier Consolidated Billing, Comments of the Pennsylvania Coalition Against Domestic Violence, Docket No. P-2016-2579249 (Jan. 23, 2017).

forgoing food, medicine, and other basic necessities to come up with the money to pay full tariff rates for service. This comes at great cost to the individual and their household, and can reverberate through the entire community – raising the cost of healthcare, draining scarce resources, and undermining the vibrancy and health of the local community.⁸⁸ Without utility services, households often turn to unsafe and/or costly alternatives for basic life essentials, including heating, cooking, refrigeration, and bathing. Extension cords are run from sympathetic neighbors, ovens or kerosene heaters are used to provide warmth, candles burn into the night, and gas-powered generators are fired up dangerously close to the home. Child development is often impacted, affecting a child's performance in school. Of course, evictions and eventual homelessness are also a direct result from the loss of service, which in turn creates strain on community safety net programs and emergency shelters. Indeed, eroding consumer service by involving suppliers in the core billing, dispute, and assistance functions performed by EDCs would exacerbate these social ills, impacting the community at large.

SCB is not in the public interest, as it would cause significant confusion for consumers, particularly those who are payment troubled or are facing the loss of critical utility services. At the same time, SCB undermines enforcement efforts to ensure that critical consumer protections are upheld. This is not only detrimental to individual households, but has a ripple effect through our surrounding communities. The Low Income Advocates submit that there is no policy justification for SCB, and urge the Commission to reject SCB.

⁸⁸ For a deeper look at the impact of the loss of utility services on low income Pennsylvanians, and the communities in which they live and work, see Review of Universal Service and Energy Conservation Programs, Joint Comments of CAUSE-PA and TURN et al., Docket No. M-2017-2596907, at 9-19 (filed Aug. 8, 2017).

C. Supplier Consolidated Billing is cost prohibitive.

As the Commission concluded just five years ago, “the extensive work and expense [to implement SCB] could result in a feature that will not be utilized sufficiently to justify the costs at this time.”⁸⁹ The Low Income Advocates agree: The costs associated with SCB are prohibitive, and substantially outweigh any potential benefit.

The likely costs associated with SCB include, but are not limited to:

- The sunk costs for each utility’s billing system, including those costs which have already been recovered and those costs which will still be recovered regardless of whether some consumers choose to be billed through their supplier;
- The cost to the EGS to develop a fully compliant billing system, including a full assessment of the likely impact to the cost for competitive service;
- The cost of Commission oversight, including increased work flow for the Bureau of Consumer Services, the Office of Administrative Law Judge, the Office of Special Assistants, the Law Bureau, the Bureau of Investigation and Enforcement, and the Bureau of Technical Utility Services;
- The increased cost for the statutory advocates, including the Office of Consumer Advocate and the Office of Small Business Advocate;
- The increased cost of staff training and systems development for EDCs to enable a transition of billing services for a segment of its customers;
- The increased cost of consumer education and outreach for the Commission, EDCs, EGSs, statutory advocates, and other consumer advocates;
- The cost to families who experience the loss or are threatened with the loss of critical electric service without access to critical consumer protections;
- The cost to social service providers that assist consumers facing the loss of electric service or who cannot afford to pay for service.

Unfortunately, any way you slice it, consumers are the ones who will pay for all of these costs – even if, on paper, the costs are allocated to the utility or the EGS. If passed on to an EGS, consumers pay through increased supplier pricing, which can be passed on to the consumer through fees or complicated pricing models designed to mask the higher costs. If passed on to the EDC, consumers will pay through increased base rates. But ratepayers have already paid and continue

⁸⁹ Investigation of Pennsylvania’s Retail Electricity Market: End State of Default Service, Final Order, Docket No. I-2011-2237952, at 67-68 (Feb. 14, 2013) (hereinafter End State Final Order).

to pay hundreds of millions of dollars through the base rate to develop sophisticated information technology infrastructure capable of producing bills which are fully compliant with the laws of the Commonwealth. Indeed, if the Commission allows SCB, consumers will pay a second time, with the inevitable result that customers will assume new risks associated with a billing structure that provides no discernible benefit in price or quality of service.

The claimed benefits of SCB do not outweigh these significant and substantial costs. Suppliers often argue that SCB is necessary to forge relationships with consumers, and reject alternatives as incomparable to the bond created through a direct and consolidated billing relationship. There are a plethora of other ways – apart from SCB – that companies can forge and nurture direct relationships with their customers: community events, giveaways, direct mailing, social media campaigns, team sponsorship, charitable donations, and most importantly by providing a reasonable rate for electric service. None of these common business strategies to forge long-term customer relationships would negatively impact the consumer rights and protections.

Connecticut's Public Utilities Regulatory Authority (PURA) recently reached the same conclusion. PURA explained:

The Authority disagrees with SCB supporters who imply that the only way to address Supplier concerns with UCB is by offering SCB for the following reasons.... Suppliers always have the opportunity to interface with their customers and market their products and services through numerous means. Suppliers could improve customer education and communication from the time the customer begins purchasing Service.⁹⁰

⁹⁰ Decision in the Matter of PURA of the Billing of All Components of Electric Service by Electric Suppliers, CT PURA Docket No. 13-08-15 (Aug. 6, 2014).

Arguments that SCB would allow suppliers to offer products and services not available in the market today fail to justify the risks of SCB. If suppliers wish to offer additional products and services, they may do so under the currently approved dual billing option. As PURA explained:

If the products, pricing and services are limited by the current UCB, the Supplier has the option to bill its customers directly under a dual billing option. This dual billing option is a tool for Suppliers to perform customized billing and rate structures. Potential customers could weigh the service under a single UCB bill versus those billed under the dual billing option.⁹¹

For those pricing structures which are not as conducive to dual billing, such time varying rates, additional changes to UCB are likely far less costly than a radical disruption of the current billing paradigm.

It is manifestly unjust and unreasonable to charge consumers duplicative costs for basic, necessary services, such as billing – especially where viable and less costly alternatives exist. Just five years ago, in February 2013, the Commission rejected SCB, and instead approved a number of changes to UCB.⁹² Those changes were enacted pursuant to the Commission’s May 23, 2015 Final Order (Joint Bill Order), and have not been afforded an opportunity to take shape or evolve, much less an opportunity to be evaluated for success.⁹³ However, the strength of the market today is a good indication that these changes were successful in driving market adoption rates. The shopping rates across the state continue to steadily grow, in spite of the fact that supplier rates are proving to impose significantly higher net costs than default service.⁹⁴

⁹¹ Id. at 6.

⁹² Investigation of Pennsylvania’s Retail Electricity Market: End State of Default Service, Final Order, Docket No. I-2011-2237952, at 67-68 (Feb. 14, 2013).

⁹³ Investigation of Pennsylvania’s Retail Electricity Market: Joint Electric Distribution Company – Electric Generation Supplier Bill, Final Order, Docket No. M-2014-2401345 (May 23, 2014) (Joint Bill Order).

⁹⁴ See Retail Energy Supply Ass’n v. Pa. PUC, No. 230 C.D. 2017, at 36 (Pa. Commw. Ct. May 2, 2018); See Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co., and West Penn Power Co. for Approval of their Default Service Programs, CAUSE-PA St. 1, Docket Nos. P-2017-2637855, P-201702637857, P-2017-2637858, P-2017-2637866, at 26 n.41 (filed Feb. 22, 2018).

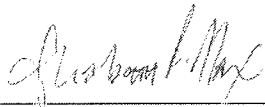
Rather than expend significant amounts of ratepayer dollars to implement SCB, the Commission should instead investigate the cost and effectiveness of the recent billing changes, and identify whether there are additional bill presentment changes to the UCB which could be reasonably made. Upending the current billing model to make sweeping and radical changes to implement SCB is not necessary, cost effective, or beneficial to consumers. Thus, SCB must fail.

IV. CONCLUSION

For all of the reasons stated above, the Low Income Advocates respectfully request that the Commission reject calls to implement SCB in Pennsylvania. We further request that the Commission grant our request to testify at the *En Banc* hearing on June 14, 2018, so that we may fully share with the Commission our substantial concerns about implementation of the billing convention in Pennsylvania, and answer any questions the Commission may have.

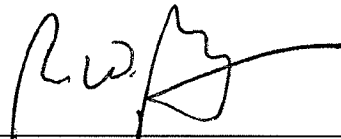
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CAUSE-PA Statement 1-R
APPENDIX B

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

En Banc Hearing on Implementation of
Supplier Consolidated Billing

:
:
:

Docket No. M-2018-2645254

**JOINT REPLY COMMENTS OF
THE COALITION FOR AFFORDABLE UTILITY SERVICES AND ENERGY
EFFICIENCY IN PENNSYLVANIA (CAUSE-PA)**

AND

**THE TENANT UNION REPRESENTATIVE NETWORK AND ACTION ALLIANCE OF
SENIOR CITIZENS OF GREATER PHILADELPHIA (TURN *ET AL.*)**

On March 27, 2018, the Pennsylvania Public Utility Commission (“Commission”) issued a Secretarial Letter listing a series of questions concerning Supplier Consolidated Billing (SCB), and invited interested parties to file comments by May 4, 2018, and set a June 14, 2018 *en banc* hearing. In response, the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA), together with the Tenant Union Representative Network and Action Alliance of Senior Citizens of Greater Philadelphia (TURN *et al.*) (collectively referred to herein as the Low Income Advocates) filed comprehensive comments detailing the full scope of our concerns regarding supplier consolidated billing.¹

On May 14, 2018, the Commission issued its second Secretarial Letter through which it established a second *en banc* hearing for July 12, 2018, and invited interested parties to file reply comments by August 24, 2018. By invitation from the Commission, the Low Income Advocates

¹ See Joint Comments of the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania, the Tenant Union Representative Network, and Action Alliance of Senior Citizens of Greater Philadelphia, Docket No. M-2018-2645254 (May 4, 2018) (hereinafter “Low Income Advocates’ Comments”).

testified at the first *en banc* hearing held on June 14, 2018. We now submit these brief reply comments for the Commission's consideration.

None of the parties supporting SCB has offered any arguments or evidence to rebut the positions advanced by the Low Income Advocates in our initial comments. We incorporate those comments by reference here, and summarize them below:

SCB is not permitted by the Public Utility Code

SCB is inconsistent with the Electric Generation Customer Choice and Competition Act.

- The Choice Act expressly delegates customer service functions to Electric Distribution Companies (EDCs). 66 Pa. C.S. § 2807(d). This necessarily includes the billing, collections, and termination standards contained in Chapter 14 of the Public Utility Code and Chapter 56 of the PUC's regulations.
- The Choice Act requires the PUC to ensure universal service programming is adequately funded, cost-effective, and available to those in need. 66 Pa. C.S. § 2802(9), (10), (17). If approved, SCB would create significant barriers to and curtail the effectiveness of universal service programming.
- The legislative history of the Choice Act evidences a clear intent for EDCs to continue to perform residential billing and customer service functions. Pa. House Journal at 2566 (Nov. 25, 1996) ("The consumer will be dealing directly with the transmission and distribution, and that stays the same, and that is also still regulated. And the duty to serve is still there.").

SCB is inconsistent with the Responsible Utility Customer Protection Act (Chapter 14) and the Standards and Billing Practices for Residential Utility Service (Chapter 56).

- Chapters 14 and 56 do not apply to suppliers. Absent clear statutory authority imposing legal responsibility on suppliers and enforcement authority on the PUC, consumers could be deprived of essential utility services without notice or an opportunity to prevent the termination. Supporters of SCB suggested at the *en banc* hearings that they could voluntarily take on the requirements of Chapter 14 and Chapter 56. However, voluntary adoption of responsibility does not and cannot offer the same level of protection to consumers, for the reasons explained more fully in our initial comments and in our oral testimony.
- Insufficient enforcement of Chapters 14 and 56 and the rights included therein would most severely impact low income families, who are disproportionately likely to need assistance, as well as medically vulnerable consumers and victims of domestic violence who are entitled to enhanced Chapter 14 and 56 protections.
 - Confirmed low income customers make up just 12.6% of the residential electric customer class, yet they account for 57.2% of payment troubled customers, 48.9% of payment arrangements, and 46.5% of involuntary terminations. (2016 Universal Service Report at 7-11).

- The PUC is not permitted to delegate the statutory duties of a public utility to a supplier. Dauphin County Industrial Authority v. Pa. PUC, 123 A.3d 1124, 1134-35 (Pa. Commw. Ct. 2015).

SCB is not in the Public Interest

SCB is Dangerous for Vulnerable Low Income Families

- SCB is incompatible with critical universal service programming, including Customer Assistance Programs (CAP), Hardship Funds, and the Low Income Usage Reduction Program (LIURP).
 - *SCB Undermines the Accessibility of Universal Service Programming*
Public utilities have an express duty under Chapter 14 to refer payment troubled customers to available universal service programming. 66 Pa. C.S. § 1410.1 (1)-(2). But even with this express obligation, and despite overwhelming demonstrated need for the program, CAP reaches less than half (47%) of *confirmed* low income customers – and just 22% of the *estimated* low income customers. (2016 Universal Service Report at 7, 50). Suppliers are under no such obligation and, thus, SCB would likely further erode already-insufficient CAP penetration rates.
 - *SCB Distorts CAP Program Costs and the Affordability Generated by the Program*
CAPs calculate discounts and/or credits based on the price of default service, and provide arrearage forgiveness on debts accrued prior to entry in the program. Supplier pricing is, on net, more expensive than default service. If SCB were to proceed as proposed, debts deferrable through CAP are likely to include higher costs for the same basic electric service, as well as potential products and services that may be lumped into the commodity cost for electricity under SCB. This would either (1) disqualify economically vulnerable customers from participating in CAP, or (2) create artificially higher programmatic costs. Both results are untenable and contrary to the requirements of the Choice Act that universal services must be adequately funded, cost effective, and available to those in need.
 - *SCB Diminishes the Availability of Hardship Fund Grants*
Hardship Fund programs are funded primarily through voluntary ratepayer donations and other independent fundraising efforts, which are matched by utility shareholder dollars. SCB would diminish the pool of ratepayer donors, which would in turn erode Hardship Fund donations.
 - *SCB Undermines the Effectiveness of LIURP*
SCB not only would interfere with LIURP referrals, as mentioned above, it would also impede the ability of EDCs to target high users and/or payment troubled consumers for usage reduction services.
- Supplier Consolidated Billing would undermine the ability of households to receive cash or crisis grant assistance through the Low Income Home Energy Assistance Program (LIHEAP), as the Pennsylvania Department of Human Services explicitly forbids suppliers from serving as a LIHEAP vendor. While this DHS policy could conceivably be revised in the future, the implementation issues created by such a broad expansion of LIHEAP vendors would cause

significant added administrative costs. This is just one of the many potential unintended costs associated with the implementation of SCB.

- Exclusion of universal service program participants from participating in SCB is insufficient to resolve these conflicts. As mentioned above, over half of *confirmed* low income customers are not currently enrolled in CAP, and the enrollment rate is even lower when you look at the *estimated* eligible population. Moreover, there are many consumers who experience an acute financial hardship, and find themselves newly eligible for assistance. Death of a primary wage earner, serious medical conditions, domestic violence, lay-offs or job losses can cause a household to face financial instability. Excluding only those who are currently participating in an assistance program would not address the thousands who may currently be eligible or who may be eligible for assistance in the future.

SCB is Unnecessarily Costly for Consumers

- Proponents of SCB have argued that any cost to the implementation of SCB would be minimal. But this is simply not true. Potential costs include, but are not limited to:
 - The sunk costs for each utility's billing system, including those costs which have already been recovered and those which will still be recovered regardless of whether some consumers choose to be billed through their supplier;
 - The cost to the supplier to create fully compliant billing systems, which will ultimately be passed to consumers;
 - The additional costs to the operational budgets of the Commission's various bureaus and offices associated with oversight of supplier billing practices, including training, case-handling, adjudication, and compliance reviews;
 - Additional costs for the Office of Attorney General that, under SCB, could experience an uptick in complaints related to supplier pricing, which would continue to fall outside of the Commission's jurisdiction;
 - Additional case-handling, training, and education costs for social and legal service agencies, which must learn the intricacies of a multitude of billing and complaint processes;
 - Additional costs to families who experience the loss or are threatened with the loss of critical electric service, without access to the same level of consumer protections available under the current billing paradigm.

It is instructive that many of the concerns noted above – and more fully explained in our initial comments – substantially mirror the concerns of each of the utilities who submitted comments at this docket,² as well as the Energy Association of Pennsylvania,³ and the Office of Consumer

² See Comments of PECO Energy Company at 2-5; PPL Electric Utilities, Inc. at 3-4; Duquesne Light Company at 4-12; Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company at 2-5; UGI Electric Division at 4.

³ See Comments of the Energy Association of Pennsylvania at 8-12.

Advocate.⁴ All of these parties have asserted that SCB is not permitted under the Public Utility Code, and further, it is both unnecessary and bad public policy.

Supporters of SCB have argued that SCB is necessary for suppliers to continue to compete in Pennsylvania. They argue that implementation of SCB would allow innovation of product offerings and services. However, when pressed at the *en banc* hearing, the EGSs were unable to come up with innovations or services specifically requiring a supplier consolidated bill, particularly given the potentials for harm. Instead, for the most part they cited goods and services that are already generally available, including:

- “frequent flyer miles”⁵
- “bundling electricity with cable and internet service”⁶
- “digital games and contests to encourage energy efficiency”⁷
- “smart thermostats”⁸
- “smart home automation”⁹
- “energy efficiency products”¹⁰
- “various applications to automate home energy and appliances.”¹¹
- “home security”¹²
- “HVAC Maintenance”¹³

⁴ See Comments of the Office of Consumer Advocate at 1-2.

⁵ Comments of the Retail Energy Supply Association at 12.

⁶ Id.

⁷ Id.

⁸ Id.

⁹ Id.

¹⁰ Id.

¹¹ Id.

¹² Comments of Drift Marketplace, Inc.

¹³ Id.

- “products from energy partners (e.g. NEST)”¹⁴
- “demand response products”¹⁵
- “time varying rates”¹⁶
- “prepaid energy plans”¹⁷
- “flat bill plans”¹⁸

In addition to many of these products already being available in the market place from non-utility providers and generation suppliers themselves, some are required to be provided by the EDCs themselves pursuant to the requirements of Act 129 of 2008.¹⁹ The EGS parties have provided no compelling arguments as to why these products should be provided by electricity suppliers, or are not already fully accessible to consumers on the marketplace. There has also been no showing by any of the parties supporting supplier consolidated billing that consumers are demanding these products be billed *by EGSs* on utility bills and, even if so, why dual billing is an insufficient solution. As pointed out by the Energy Association, “[t]here is nothing unduly or inherently prohibitive or complicated about dual billing that hinders EGSs’ ability to market and bill for other products services.”²⁰

As we emphasized in our initial comments, the purpose of the Choice Act is “to create direct access by retail customers to the competitive market for the *generation of electricity*.”²¹ Indeed, the primary legislative purpose was to permit competitive forces to effectively control “*the*

¹⁴ *Id.*

¹⁵ Comments of National Energy Marketers Association at 7.

¹⁶ *Id.*

¹⁷ Comments of EGS Coalition at 47.

¹⁸ *Id.*

¹⁹ See 66 Pa. C.S. § 2806.1(b), (d) (EDCs to offer energy conservation and energy efficiency plans and peak load reduction) and § 2807(f) (requiring EDCs as default service provider to provide time of use rates). The Low Income Advocates would also note that in the case of prepaid energy plans, the EGS parties have made no showing that such an offering would even be permissible under the Public Utility Code.

²⁰ EAP Comments at 7.

²¹ 66 Pa. C.S. § 2802(12).

cost of generating electricity,” for the benefit of all customer classes, while ensuring that such service (essential to the health and well-being of residents) remains available to all customers on reasonable terms and conditions.²² The Choice Act, and opening the electric market to competition generally, was never intended to be a vehicle to allow EGSs to peddle their non-commodity wares. In fact, there is no mention of “value added” services anywhere in the Choice Act. What the Choice Act did do – in addition to opening up wholesale and retail competition for electric commodity service – is enshrine into statute that “[e]lectric service is essential to the health and well-being of residents, to public safety and to orderly economic development,” and that “electric service should be available to all customers on reasonable terms and conditions.” 66 Pa. C.S. § 2802 (9).²³ The Choice Act further set out that “[r]eliable electric service is of the utmost importance to the health, safety and welfare of the citizens of the Commonwealth.” 66 Pa. C.S. § 2802 (12). Both EDCs and the PUC are responsible under the Public Utility Code for ensuring that these mandates are fulfilled. These obligations should not be lightly disregarded simply because EGSs desire to upend the billing paradigm. Supporters of SCB have made no showing of a nexus between the non-commodity products and services referenced by those who support SCB and the generation of electricity or the billing for electricity that would require SCB. As the Low Income Advocates noted in *en banc* testimony, SCB is inconsistent with the Public Utility Code, and no possible benefit of SCB outweighs the potentials for harm to consumers or the real danger SCB poses to keeping essential electric service available to all customers on reasonable terms and conditions.

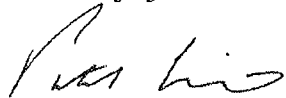
²² 66 Pa. C.S. § 2802(5), (9), (10), (12).

²³ See also Memphis Light, Gas & Water Division v. Craft, 436 U.S. 1, 18 (1978) (“Utility Service is a necessity of modern life; indeed, the discontinuance of water or heating for even short periods of time may threaten health and safety.”).

For all of the reasons outlined by the Low Income Advocates, the utilities, the Energy Association, and the Office of Consumer Advocate, the Commission should reject SCB as inconsistent with the Public Utility Code and the public interest.

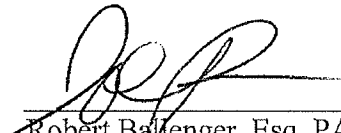
Respectfully Submitted,

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BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of a Default Service Program for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

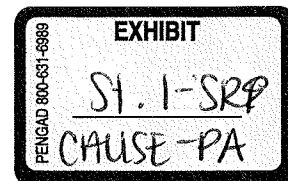
SURREBUTTAL TESTIMONY OF HARRY GELLER

ON BEHALF OF

THE COALITION FOR AFFORDABLE UTILITY SERVICES AND

ENERGY EFFICIENCY IN PENNSYLVANIA (“CAUSE-PA”)

August 28, 2020



1 **PREPARED SURREBUTTAL TESTIMONY OF HARRY GELLER**

2 **Q. Please state your name, occupation, and business address.**

3 A. Harry Geller. I am an attorney. I am currently retired from the Pennsylvania Utility Law
4 Project (PULP), though I have maintained an office at their location, 118 Locust St., Harrisburg,
5 PA 17101 and serve as a consultant to organizations representing the interests of low income
6 consumers. Since the Governor's Emergency Order regarding the Covid-19 pandemic, I have been
7 working from 4213 Orchard Hill Rd, Harrisburg, PA, 17110.

8 **Q: Did you previously submit testimony in this proceeding?**

9 A: Yes, I submitted Direct and Rebuttal Testimony (CAUSE-PA St. 1 & 1-R).

10 **Q. Please state the purpose of your rebuttal testimony.**

11 A: The purpose of my surrebuttal testimony is to respond to certain aspects of the following:

- 12 • Duquesne Light Statement 5-R, the Rebuttal Testimony of Katherine M. Scholl
13 • EGS Parties' Statement 1-R, the Rebuttal Testimony of Christopher H. Kallaher

14 My silence in response to any rebuttal testimony served to date in this proceeding should not be
15 construed as an agreement therewith. Unless required for context or clarification in providing a
16 further response to other parties' testimony, I will not reiterate the extensive arguments, evidence,
17 and recommendations that I provided in my direct and rebuttal testimony. To the extent an
18 argument raised by any party was already sufficiently addressed in my direct or rebuttal testimony,
19 I do not intend to respond, and stand firmly on the evaluation, analysis, and recommendations
20 contained in my direct and rebuttal testimony. Nothing proposed by any other witness has changed
21 my initial conclusions or recommendations.

1 **RESPONSE TO DUQUESNE LIGHT WITNESS KATHERINE M. SCHOLL**

2 **Standard Offer Program**

3 **Q: In your direct testimony, you recommend that residential consumers with a high bill**
4 **complaint should be screened for appropriate universal service programs and, if eligible,**
5 **should not be referred to the Standard Offer Program (SOP). How did Ms. Scholl respond**
6 **to this recommendation?**

7 A: Ms. Scholl argues that customers with high bill complaints should be provided with a broad
8 array of options – including assistance programs, standard offer programs, payment arrangements,
9 and referrals to PaPowerSwitch.com, and budget billing. (Duquesne St. 5 at 11:3-12). She agrees
10 that CAP may be the best option for many eligible customers (Id. at 11:8-9), but believes that those
11 who are referred to pursue enrollment in CAP should nevertheless also be referred to the SOP, so
12 as not to deprive consumers of the choice between CAP and the SOP. (Id. at 11:12).

13 **Q: How do you respond?**

14 A: I agree with Ms. Scholl that customers with high bill complaints, including payment
15 troubled customers, should be provided with options. However, it is unclear what kind of
16 information – if any – is provided to a consumer so they may weigh the potential benefits and risks
17 of the various choices. CSRs do not have unlimited time to assist each customer, yet, if a wide
18 array of options are presented to a consumer, it is critical that Duquesne commit to putting in the
19 time and resources necessary to provide the benefits and drawbacks of each option in order to
20 empower consumers to make an affirmative, informed decision about the option that best fits their
21 needs over time. In particular reference to the potential interaction of high bill complaints, CAP
22 enrollment, and the SOP, I do not believe that Ms.Scholl's proposal to give the consumer the option

1 of CAP or SOP is workable. I recommend that Duquesne first screen payment troubled customers
2 for Universal Service programs. If the customer is screened to be eligible for CAP, they should
3 not be referred to SOP. This is because if Duquesne's proposed plan to permit CAP shopping is
4 ultimately approved, which I do not recommend, a consumer who determines to enroll in CAP
5 may be enrolled in a non-compliant SOP product for as long as 120 days because the SOP does
6 not guarantee that the price of electricity will remain at or below the price to compare for the full
7 duration of the contract. As such, offering the choice of both SOP and CAP enrollment would
8 work at a cross purposes. I discuss the substantial problem that this potential 120-day conflict
9 would create in greater detail below, in the section regarding CAP shopping.

10 **Q: Ms. Scholl objects to your recommendation that Duquesne conduct an analysis of the**
11 **costs SOP participants pay at the conclusion of the 12-month SOP period prior to its next**
12 **DSP filing. What was the basis for her objection?**

13 A: Ms. Scholl's objections are twofold. First, she refers to the testimony of DLC witness
14 Fisher who noted that the Commission's policy regarding the SOP structure was established
15 through a statewide proceeding with numerous stakeholders, and she therefore concludes that my
16 recommended analysis is unnecessary absent a revision in Commission policy. Second, she argues
17 that it is unclear how Duquesne would treat the costs incurred for such an evaluation.

18 **Q: What is your response?**

19 A: First, Commission policy is not intended to be implemented in a vacuum or without
20 consideration of ramifications. Although Duquesne may, in good faith, believe that it must adhere
21 to this policy, I believe it is a mistake for Duquesne to blindly follow a policy put forward in 2012
22 without considering relevant data and information unearthed since that policy determination.
23 Indeed, utilities regularly deviate from established policy when warranted based on the facts and

1 circumstances. This should be no different. As Duquesne witness Scott Fisher himself recognized
2 in his rebuttal testimony, there is a host of data and evidence on the record in this proceeding which
3 shows that shopping customers have paid and continue to pay increasingly more than the price to
4 compare year over year. (See Duquesne St. 3-R at 47:4-14, 50:16 to 51:4). This data was
5 unavailable when the Commission established policy guidelines for SOPs, and strongly supports
6 the need for Duquesne to divert from the Commission's policy to ensure that customers who do
7 not actively select a new supplier at the end of the contract term are not unknowingly rolled onto
8 a high cost month to month rate.

9 Second, with regard to Ms. Scholl's concern about how to assign the costs of analyzing
10 data associated with the SOP, it would appear to be most appropriate that the expenses for
11 conducting an analysis of consumer costs associated with the SOP should be recovered in the same
12 manner that Duquesne currently recovers costs for developing its Default Service Plan.

13 **CAP Shopping**

14 **Q: Ms. Scholl declines to support your recommendations regarding Duquesne's CAP**
15 **shopping proposal because it runs contrary to the Commission's guidance. How do you**
16 **respond?**

17 A: First, it is not accurate to conclude that Duquesne's current CAP shopping policy, or my
18 recommendations regarding its proposal for June 1, 2021 through May 31, 2025, contradicts
19 Commission guidance. While the Commission did issue a Secretarial Letter requesting that EDCs
20 "consider the issues and concerns" surrounding CAP shopping in its Default Service Plan, that
21 Secretarial Letter did not dictate that utilities must follow the CAP shopping platform set forth in

1 the Commission's *proposed* CAP shopping policy statement.¹ Importantly, the Commission has
2 yet to issue final guidance on CAP shopping, and the issue remains pending at a separate docket.²
3 Although I understand Ms. Scholl's desire to comply with Commission policy, whatever it might
4 be, there are a host of issues with the assumption that the Commission's final proposed CAP
5 shopping policy statement will remain unchanged from its originally proposed iteration, as it
6 suggests that the Commission made a predetermination of the issue – before consideration of any
7 input from stakeholders.

8 Ultimately, I am hopeful that the Commission will carefully consider the evidence
9 uncovered in this and the PECO and PPL Default Service Plan proceedings, as well as up to date
10 experience gained with the CAP shopping program in First Energy's service territory, before
11 issuing its final CAP shopping policy statement. But in any event, based on the substantial level
12 of compelling record evidence and data uncovered in this proceeding, the Commission's *proposed*
13 policy guidelines for CAP shopping programs should not prevent Duquesne from continuing its
14 current rational, fiscally responsible, and strongly justifiable policy of prohibiting CAP shopping.

15 **Q: In response to your Direct Testimony, Ms. Scholl notes that requiring CAP applicants**
16 **to “wait until their EGS contract expiration” to enroll in CAP would delay CAP enrollment**
17 **and require CAP customers to pay a higher monthly payment during that time. What is**
18 **your response?**

¹ See Investigation into Default Service and PJM Interconnection, LLC Settlement Reforms, Secretarial Letter, Docket No. M-2019-3007101 (Jan 23, 2020).

² Electric Distribution Company Default Service Plans – Customer Assistance Program Shopping, Proposed Policy Statement Order, Docket No. M-2018-3006578 (Feb. 28, 2019).

1 A: I agree with Ms. Scholl that requiring CAP applicants to wait until their current shopping
2 contract expires would cause additional financial hardship on economically vulnerable consumers.
3 But the solution is not to open up CAP customers to additional financial harm and the accrual of
4 unaffordable arrears by allowing high-cost contracts to persist for a period of time after they enter
5 CAP. To address this problem, I recommended that Duquesne establish a CAP rule that would
6 allow shopping customers to apply for CAP and concurrently check a box which would indicate
7 their desire to return to default service upon entry into CAP, rather than permitting the CAP
8 customer to continue in a high cost contract. (CAUSE-PA St. 1 at 51:7-8). This would not force
9 CAP customers to continue with a contract that has likely already contributed to uncontrollably
10 high costs and the accrual of arrears, and I believe addresses Ms. Scholl's concern.

11 **Q: While Ms. Scholl acknowledges and validates your concern that customers who enter**
12 **CAP with a noncompliant product will drive up the cost of CAP, Ms. Scholl argues that the**
13 **risk is sufficiently time-limited to a period of 120 days. How do you respond?**

14 A: The level of risk is significant and the financial harm to ratepayers and to CAP customers
15 as a result of 4 months of unrestricted CAP shopping is substantial, and should not be easily
16 dismissed. In my Direct Testimony, I explained that Duquesne's confirmed low income shopping
17 customers (exclusive of CAP customers) paid an average \$201.21 more per year than they would
18 have paid if they remained on default service. This comes out to \$16.77 per month. Over 120
19 days, the average confirmed low income shopping customer will have been charged \$67.08 in
20 excess of the default service price. As of December 31, 2018, Duquesne had 36,075 customers
21 enrolled in its CAP.³ Even if just 10% of Duquesne's CAP customers (3,607) enter CAP with an

³ Pa. PUC, BCS, 2018 Report on Universal Service Programs & Collections Performance, at 51 (Dec. 2019),
http://www.puc.state.pa.us/General/publications_reports/pdf/EDC_NGDC_UniServ_Rpt2018.pdf.

1 existing contract, the cost of CAP would increase by roughly one quarter of a million dollars
2 (\$241,958) over that 120-day period. Likewise, the 120-day holdover contract will erode the
3 benefits available to CAP customers to address dangerous levels of energy poverty and energy
4 insecurity by causing CAP participants to prematurely expire their maximum CAP credit
5 allotment. These are serious and substantial risks and costs to ratepayers and economically
6 vulnerable consumers that cannot and should not be so easily be dismissed.

7 **Q: Ms. Scholl notes that your position in this proceeding is different from your position**
8 **in the First Energy Default Service Plan proceeding at Docket P-2017-2637855. How do you**
9 **respond?**

10 A: Ms. Scholl is correct, I took a different position in the First Energy Default Service Plan
11 proceeding with respect to an appropriate design for CAP shopping in that service territory.
12 Simply put, my recommendations regarding CAP shopping are different in this case because they
13 are based on the revelation of different facts and circumstances. In this case, over two years after
14 the First Energy DSP proceeding, available data unequivocally shows that the financial harms
15 associated with CAP shopping have persisted notwithstanding carefully designed CAP shopping
16 parameters. (CAUSE-PA St. 1 at 46:5 to 48:16). Thus, pursuant to the available facts and data, I
17 believe that Duquesne's current policy regarding CAP shopping is the most prudent and least
18 dangerous option, and I do not believe that Duquesne's proposed modifications to its current,
19 fiscally safe, and proven CAP shopping policy should move forward at this time.

20 **Q: In response to your concerns about Duquesne's scant plans to educate CAP customers**
21 **about shopping, Ms. Scholl offers additional details about Duquesne's education plans –**
22 **including outreach through Duquesne's website and training for Community Based**

1 **Organizations and Customer Service Representatives. Does this additional explanation**
2 **address your concerns?**

3 A: No. While the additional details provided by Ms. Scholl offer a good start, they are not
4 sufficient. I am still concerned about the lack of detail with Duquesne's outreach and education
5 plan. It is important to develop the substance of intended messaging and strategies for consumer
6 engagement well in advance of when CAP shopping or other market enhancement programs would
7 begin. Especially in this situation, where Duquesne is proposing a change of policy that will require
8 some difficult as well as risky choices for the consumer.

9 Importantly, a critical component to educating customers about CAP shopping remains
10 missing from this analysis: Duquesne's recently redesigned CAP bill. A consumer's monthly bill
11 is an important tool to convey critical information to consumers. Information about the redesigned
12 bill provided by Duquesne indicates that, while there is a summary line item on the top of the first
13 page naming the supplier and the total monthly supplier charges, the actual supplier kWh price
14 information does not appear in that prominent position. Duquesne's CAP bill does not detail the
15 supplier price and the applicable Duquesne price to compare until the third page of the bill –
16 making it less prominently displayed and therefore less likely or realistic that CAP customers reach
17 the point in the bill where they can compare pricing. Coupled with the fact that Duquesne's CAP
18 participants will not experience an *immediate* financial impact resulting from high contract prices,
19 it is absolutely essential that Duquesne modify its CAP bill to provide clear information to a CAP
20 customer about shopping – as well as the financial impact that shopping while enrolled in CAP
21 may have on their CAP benefits.

22 Duquesne should amend its CAP bill to quickly and clearly alert the customer to contact
23 Duquesne if their rates ever exceed the default service price. While I understand Duquesne is

1 proposing to monitor CAP shopping compliance, which I strongly support and believe would be
2 essential, in the event some form of CAP shopping is ultimately approved, it can only monitor
3 compliance effectively if the supplier is rate ready. Thus, it is likely, if my recommendation is not
4 followed, that new CAP enrollees who had previously obligated themselves to a supplier at the
5 time of enrollment in CAP may pay rates in excess of the default service rates for many months,
6 or even years, thereby eroding the availability of benefits for vulnerable, low income consumers
7 enrolled in CAP and increasing the overall cost of CAP as a whole. This unwarranted increase in
8 costs to CAP participants and other ratepayers would be at a cross purpose to the overarching laws
9 and policies governing universal service programming.

10 **Q: Ms. Scholl notes that Duquesne is working to redesign its residential customer bill.**
11 **Does this address your concerns with Duquesne's CAP bill?**

12 A: No. While I support robust education and a significant bill redesign, CAP bills contain a
13 lot of critical information in addition to the standard residential billing information, including
14 information about the customers' use of available CAP credits and information about the amount
15 of arrearages that are still pending or were previously forgiven. Thus, the specific CAP bill changes
16 must be well designed, comprehensive, and accompanied by and integrated with the appropriate
17 consumer education, before a dramatic change to CAP shopping is approved.

18 **RESPONSE TO EGS PARTIES' WITNESS CHRISTOPHER H. KALLAHER**

19 **Q: Please summarize the testimony of Mr. Kallaher to which you will respond.**

20 A: Mr. Kallaher argues that the data I set forth in my Direct Testimony showing that residential
21 shopping customers paid roughly \$102.9 million more than the default service price since January
22 2017, and that confirmed low income shopping customers (not enrolled in CAP) paid \$900,000
23 more than the default service price in the same period of time, is beyond the scope of this

1 proceeding. (EGS Parties St. 1R at 4:10-13; CAUSE-PA St. 1 at 6:15-21). While Mr. Kallaher
2 does not dispute the accuracy of this data, he nevertheless asserts that the Commission may not
3 consider EGS pricing in decisions about whether and to what extent the Commission should
4 approve the competitive market enhancement programs in Duquesne's Default Service Plan. In
5 Mr. Kallaher's opinion, any consideration of competitive market prices – even for the purposes of
6 evaluating Duquesne's Commission approved default service programs – would “violate both the
7 Commission's enabling statutes and its precedent.” (EGS Parties St. 1R at 1:18 to 2:12; 4:9 to
8 5:11).

9 Other than to attack the general relevance of data showing that Duquesne's shopping
10 customers have paid and continue to pay millions of dollars more than default service customers,
11 Mr. Kallaher had no specific response to the extensive pricing data I provided in my Direct
12 Testimony. That said, Mr. Kallaher did respond directly to a report I cited and briefly described
13 in my Direct Testimony showing evidence of targeted overcharging of low income and minority
14 consumers in Massachusetts. (EGS Parties St. 1R at 6:12 to 7:5). Mr. Kallaher argues that the
15 research in Massachusetts “did not offer any clear picture of what may be going on either with
16 low-income shopping in Massachusetts or the sales and marketing practices of competitive
17 retailers serving that customer group.” (EGS Parties St. 1R at 6:19-21). He concludes that this
18 report should be given no weight because Massachusetts places low-income customers “on a
19 separate rate code, which makes tracking data related to that customer group easier to separate
20 from the broader set of residential customers.” (EGS Parties St. 1R at 6:3 to 7:5).

21 **Q: Is data showing that residential and low income customers pay significantly more**
22 **than default service prices relevant to and within the scope of this proceeding?**

1 A: Yes. The competitive market enhancement programs within Duquesne’s Default Service
2 Plan, and the costs associated therewith, must be just, reasonable, consistent with applicable laws,
3 and in the public interest to be approved. Evidence that consumers in the competitive market pay
4 significantly more than the default service price is absolutely relevant and in fact critical to the
5 Commission’s determination of whether to approve ratepayer supported, EDC administered, and
6 Commission endorsed programs that encourage or otherwise facilitate participation in the
7 competitive market. This is particularly relevant when CAP benefits, responsibilities, and costs are
8 related to the EDC default price.

9 Further, Mr. Kallaher’s argument that the Commission lacks authority to oversee
10 competitive market programs – including CAP shopping programs and the Standard Offer
11 Program (SOP) – has been explicitly rejected by the Commonwealth Court on multiple occasions
12 – including in the case cited by him to support his theory. (See EGS Parties St. 1R at 5 n.6 (citing
13 CAUSE-PA et al. v. Pa. PUC, 120 A.3d 1087 (Commw. Ct. 2015)). While Mr. Kallaher is correct
14 that the PUC *generally* lacks authority to regulate EGS rates in the competitive market, he is wrong
15 to suggest that the Commission is also unable to consider supplier pricing trends in the residential
16 market to make decisions about Commission approved CAP programming – or other EDC
17 programming for that matter. As the Commonwealth Court found in the case Mr. Kallaher cites in
18 his testimony: “[T]he absence of authority to regulate EGS rates alone does not compel the
19 conclusion that the PUC lacks the authority to adopt rules attendant to universal service programs
20 that may have the effect of limiting competition and choice with respect to low-income

1 customers.”⁴⁵ Given that the Commission has the clear authority to review and approve universal
2 service and competitive shopping rules and conditions, it is axiomatic that the Commission must
3 also have the authority to review relevant data and information about the residential competitive
4 market to determine whether those rules and conditions are appropriate and supported by
5 substantial evidence.

6 I am advised by counsel for CAUSE-PA, that Mr. Kallaher’s unsound legal theories will
7 be addressed further through briefing. Suffice it to say here, the Commission has the clear
8 authority to review residential shopping experience (including price) in determining whether and
9 to what extent it should build in protections for participants in its CAP and SOP that may restrict
10 the ability to shop.

11 **Q: Why is the Massachusetts report documenting disparities in high cost contracts by**
12 **race and income level relevant to the Commission’s determination in this case?**

13 A: The issues with excessive pricing in the residential consumer market are widespread across
14 this state and in other comparable competitive market states, and do not appear to vary across
15 geographic service territories. In PECO Energy Company’s recently concluded DSP proceeding,
16 evidence showed that residential shopping consumers paid \$733 million more than the default
17 service price over a five year period, and confirmed low income shopping customers paid nearly

⁴ CAUSE-PA et al. v. Pa. PUC, 120 A.3d 1087, at 1101 (Commw. Ct. 2015). Importantly, the Commonwealth Court explicitly looked to the question of whether the Commission could regulate EGS pricing and terms and conditions of service in the context of universal service programs as well as the SOP. With respect to both universal service programs and the SOP, the court unequivocally concluded that the Commission may set rules and restrictions that impact the supplier pricing and the ability of program participants to shop.

⁵ Id. at 1103-1104.

1 \$9.9 million more than the default service price.⁶ The same excessive pricing is also occurring in
2 PPL Electric service territory, where evidence uncovered in that service territory showed
3 residential shopping customers paid over \$295 million more than the default service price over a
4 five-year period, and – over that same period - confirmed low income shopping customers paid
5 \$57.6 million more than the default service price.⁷

6 The fact that pricing trends are consistent across geographic service territories (across the
7 state and other competitive market states) is consistent with the fact that many if not most of the
8 electric suppliers in the market today operate across Pennsylvania and in multiple competitive
9 market states.⁸ A report highlighting the Massachusetts experience is simply another example of
10 evidence that is relevant and illustrative.

11 Information about excessive pricing and targeting of high cost contracts to low income
12 consumers is pertinent to determining whether it is just and reasonable, and consistent with the
13 public interest, to open up Duquesne’s economically vulnerable CAP customers to excessive prices
14 in the competitive market – and the impact that such exposure would have on individual CAP
15 customers and to the cost of CAP, which is paid for by other residential ratepayers. As I have
16 previously explained, the Commission has a statutory obligation to ensure that universal service

⁶ Petition of PECO Energy Company for Approval of a Default Service Program for the Period of June 1, 2021 through May 31, 2025, Direct Testimony of Harry Geller on Behalf of the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania, Docket No. P-2020-3019290 (admitted to the record on July 30, 2020).

⁷ Petition of PPL Electric Utilities Corp. for Approval of a Default Service Program for the Period of June 1, 2021 through May 31, 2025, Direct Testimony of Harry Geller on Behalf of the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania, Docket No. P-2020-3019356 (admitted to the record on Aug. 13, 2020).

⁸ Every member of the EGS Parties operates across the state, and several operate in Massachusetts and other comparable competitive market states. Energy Switch Massachusetts, <http://www.energyswitchma.gov/#/supplierlist>; Plug In Illinois, <https://www.pluginillinois.org/suppliers.aspx>; Maryland Public Service Comm’n, Electric Supplier, <https://www.psc.state.md.us/electricity/electric-supplier/>; NY Dep’t Public Service, Listing of ESCO Companies Regulated by the NY PSC, <http://documents.dps.ny.gov/public/common/EscoSearch.aspx>.

1 programs are both cost effective and accessible to those in need. Thus, the average prices that
2 residential and confirmed low income shopping customers have paid for competitive electricity is
3 squarely relevant to whether it is in the public interest to allow CAP customers to shop for
4 competitive market supply – even for a short period of time.

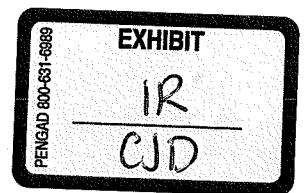
5 **Q: Mr. Kallaher argues that Massachusetts' low income customers have a separate rate**
6 **code, and is therefore not comparable to Duquesne Light service territory. Is this correct?**

7 A: No. While Duquesne does not have a separate rate code for low income customers not
8 enrolled in CAP, it does closely track confirmed low income consumers, which includes those who
9 are or were recently enrolled in a universal service program within the last two years, and that data
10 is available by zip code just as it was in Massachusetts. (See CAUSE-PA St. 1 at 13:13-14:2).

11 **Q: Does this conclude your surrebuttal testimony?**

12 A: Yes.

Exhibit CJD- 1R



**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 6) Reference page 25, lines 5-8 of Mr. Kallaher's direct testimony. Please identify any such "more productive" solar development opportunities that are "in the offing."

RESPONSE: I had no specific projects in mind when I made that statement. My point is that I consider projects that are driven by private capital based on a developer's own assessment of the market opportunity in building such a project to be more efficient and thus more product than having a utility solicit a long-term PPA for solar capacity based on what appears to be little more than a general sense that solar power is a good thing.

Provided By: Chris Kallaher

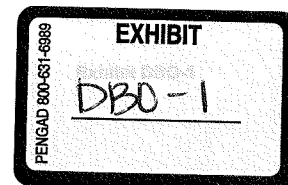
APPENDIX A

Appendix A

Christopher Kallaher – List of Commission Proceedings

1. On behalf of Direct Energy & RESA – Met-Ed/Penelec DSP (P-2009-2093053 / P-2009-2093054) – Direct, Rebuttal & Surrebuttal
2. On behalf of Direct - PECO DSP & Rate Mitigation Plan – Docket No. P-2008-2062739
3. On behalf of RESA FirstEnergy DSP II – (P-2011-2273650), Direct Rebuttal & Surrebuttal
4. On behalf of RESA PPL DSP II (to be effective June 1 2013) (P-2012-2302074) – Direct, Rebuttal & Surrebuttal
5. On behalf of RESA PECO DSP II (P-2012-2283641) Direct, Rebuttal & Surrebuttal

Duquesne Light Company
Default Service Supply Plan - June 1, 2021 through May 31, 2025
Illustrative Example - Derivation of Residential and Lighting Default Service Supply Bi-Annual Rate Adjustment



		Residential Classes (RS, RH, RA)	Lighting Classes (AL, SE, SM, SH, PAL)	
1	Competitive Auction Average Wholesale Price (\$/MWh)	\$50.00 /MWh	\$50.00 /MWh	Weighted bid price (Note 1)
2	Line Losses - T & D	6.9%		Transmission (0.8%); distribution (6.1%)
3	Price Adjustment for Losses (\$/MWh)	\$3.45 /MWh	\$3.45 /MWh	Line 1 * Line 2
4	Adjusted Wholesale Price for Losses (\$/MWh)	\$53.45 /MWh	\$53.45 /MWh	Line 1 + Line 3
5	Solar Contract Cost	\$0.00 /MWh	\$0.00 /MWh	Estimated expenses for solar contract costs per order at Docket No. XXX.
6	Forecast POLR Sales (MWh)	1,361,000		Forecast Residential & Lighting default service sales (MWh)(Note 3)
7	Outside Services Fees	\$64,615		Outside services to conduct Competitive Auctions (Note 3)
8	Default Service Costs	\$576,179		Amortization of 6 months of default service costs per order at Docket No. XXX. (Note 3)
9	Administrative Adder (\$/MWh)	\$0.47 /MWh	\$0.47 /MWh	(Line 7 + Line 8) / Line 6
10	Reconciliation Adjustment	(\$50,000)		(Over)/under collection including interest (Note 1)
11	Forecast POLR Sales (MWh)	1,361,000		Line 6
12	E Factor Rate (\$/MWh)	(\$0.04) /MWh	(\$0.04) /MWh	Line 10 / Line 11
13	Adjusted Wholesale Price (\$/MWh)	\$53.88 /MWh	\$53.88 /MWh	Line 4 + Line 5 + Line 9 + Line 12
14	Residential/Lighting Rate Factor	1.0059	0.5708	Exhibit DBO-2
15	Adjusted Wholesale Price for Rate Factor (\$/MWh)	\$54.20 /MWh	\$30.75 /MWh	Line 13 * Line 14
16	TOU Program Expenses	\$44,667		Note 1
17	Forecast POLR Sales (MWh)	1,000,000		Forecast Residential default service sales (MWh)(Note 1)
18	TOU Adder (\$/MWh)	\$0.04 /MWh	\$0.00 /MWh	Line 16 / Line 17
19	Total Adjusted Wholesale Price (\$/MWh)	\$54.24 /MWh	\$30.75 /MWh	Line 15 + Line 18
20	PA GRT @ 5.9%	\$3.40 /MWh	\$1.93 /MWh	Line 19 * (.059/(1-.059))
21	Total Retail Rate (\$/MWh)	\$57.64 /MWh	\$32.68 /MWh	Line 19 + Line 20
22	Default Service Supply Rate	5.7642 ¢/kWh	3.2685 ¢/kWh	Line 21 / 10 (Note 2)

1/ For illustrative purposes only.

2/ Lighting class supply rate will be applied to monthly kWh consumption of each fixture in rate classes SM, SH and PAL to derive monthly fixed default service supply charge per fixture.

3/ Annual illustrative estimates shown in DBO-5.

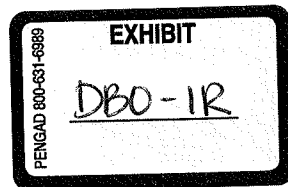


Exhibit DBO- 1R

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

- DSS_b = Company costs may also include the expenses to support time-of-use (“TOU”) programs offered by the Company. Time-of-use expenses will be assigned to the applicable customer class for recovery through this Rider. (C)

- SLR = The costs associated with any Commission-approved solar contracts and its administration will be recovered from the customers in the applicable procurement group(s) that have received an allocation of the AECs associated with the solar contracts. The proceeds of any solar energy, capacity, ancillary services and solar AECs that are acquired and in excess of those allocated to default service suppliers, and sold into the market, will be netted against solar contract costs.

- E = Experienced net over or under collection for each customer procurement group based on the revenue and expense for the six (6) month period ending one-hundred twenty (120) days prior to the end of Application Period. The DSS rate effective June 1 shall include reconciliation of revenue and expense for the six (6) month period October through March. The DSS rate effective December 1 shall include reconciliation of revenue and expense for the six (6) month period April through July. Interest shall be computed monthly at the rate provided for in Title 52 Pa. Code §54.190(c), from the month the over collection or under collection occurs to the effective month that the over collection is refunded or the under collection is recouped.

- S = The Company's default service retail kWh sales to customers in the applicable Customer Class, projected for the Application Period.

- F = Rate Factor only for the residential and lighting customer groups, updated annually when DSS rates are updated, to become effective June 1st of each year. The Rate Factor shall be 1.0 for all other customer groups. DSS for residential and lighting customer groups will be obtained in the same competitive auction. The Rate Factor adjustment reflects the load shape of the residential and lighting classes. The Rate Factor will be as follows for each Application Period. (C)
(C)
(C)

Application Period	Residential	Lighting
June 1, 2021 through May 31, 2022	X.XXXX	X.XXXX
June 1, 2022 through May 31, 2023	X.XXXX	X.XXXX
June 1, 2023 through May 31, 2024	X.XXXX	X.XXXX
June 1, 2024 through May 31, 2025	X.XXXX	X.XXXX

(C)
(C)
(C)
(C)

- T = The Pennsylvania gross receipts tax rate in effect during the billing month, expressed in decimal form.

The rate shall become effective for default supply service rendered on and after the beginning of the Application Period unless otherwise ordered by the Commission, and shall remain in effect for the effective periods defined above, unless revised on an interim basis subject to the approval of the Commission. Pursuant to 52 Pa. Code §69.1809(c), upon determination that the DSS, if left unchanged, would result in a material over or undercollection of supply-related costs incurred or expected to be incurred during the effective period, the Company may file with the Commission for an interim revision of the DSS to become effective thirty (30) days from the date of filing, unless otherwise ordered by the Commission.

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

(C)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

CALCULATION OF RATE – ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM

(C)

DSS Electric Vehicle Time-of-Use Pilot Program (“DSS EV-TOU”) rates shall be supplied via the same fixed price, full requirements (“FPFR”) products that provide default service supply for the applicable customer class. The DSS EV-TOU rates will be distinguished by three time periods throughout the year. The Off-Peak Period will consist of all hours every day from 11:00 PM through 6:00 AM. The On-Peak Period will consist of all hours every day from 1:00 PM through 9:00 PM. All other hours will be included in the Shoulder Period. The same On-Peak, Off-Peak, and Shoulder Periods will be applicable to all eligible DSS EV-TOU service customers.

(C)

The DSS EV-TOU rates shall be filed with the Commission no less than sixty (60) days prior to the start of the next Application Period as defined under the Default Service Supply Rate section of this Rider. Rates are reconciled on a semi-annual basis in accordance with the Default Service Supply Rate section of this Rider. The rates shall include an adjustment to reconcile revenue and expense for each Application Period. The DSS EV-TOU shall be determined to the nearest one-thousandth of one (1) mill per kilowatt-hour and shall be applied to all kilowatt-hours billed for DSS EV-TOU rates provided during the billing month.

(C)

During the pilot program, the DSS EV-TOU rates will apply to all load associated with the applicable meter.

(C)

$$DSS = [(CA + SLR + (DSS_a + E)/S) * F * \underline{TOU F} + (DSS_b/S)] * [1/(1 - T)]$$

(C)

Where:

(C)

DSS = Default Service Supply rate as defined above, with the addition of the EV-TOU Rate Factors.

(C)

TOU F = EV-TOU Rate Factors (as defined below), updated annually when DSS rates are updated, to become effective June 1st of each year, will be utilized to derive the On-Peak, Shoulder, and Off-Peak rates for the customer class based on its respective energy consumption patterns and capacity requirements, as approved in the Company’s most recent DSP proceeding at Docket No. P-2020-XXXXXXX.

(C)

(C)

Electric Vehicle Time-of-Use Rate Factors									
Application Period	Residential RS, RH, RA			Small C&I ⁽¹⁾ GS, GM<25, GMH<25			Medium C&I GM & GMH ≥ 25kW < 200 kW		
	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾
June 1, 2021 through May 31, 2022	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2022 through May 31, 2023	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2023 through May 31, 2024	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2024 through May 31, 2025	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX

(C)

⁽¹⁾Rate Schedule UMS is not eligible for the Electric Vehicle Time-of-Use Pilot Program.

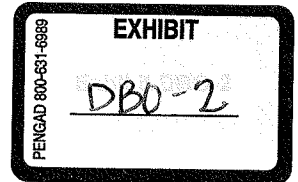
⁽²⁾Denotes On-Peak

⁽³⁾Denotes Shoulder

⁽⁴⁾Denotes Off-Peak

(C) – Indicates Change

Duquesne Light Company
 Default Service Supply Plan - June 1, 2021 to May 31, 2025
 Derivation of DSS Rate Factors for Residential and Lighting Customers



Capacity		Residential	Lighting	Total
1	Capacity Obligation (MW-day)			
2	2016	482,205	703	482,908
3	2017	486,145	0	486,145
4	2018	509,044	661	509,705
5	2019	528,864	466	529,330
5	2021/2022 Capacity Price (\$/MW-day) (1)	\$140.45	\$140.45	\$140.45
6	Load (MWH)			
7	2016	4,480,771	59,896	4,540,667
8	2017	4,152,456	59,440	4,211,896
9	2018	4,540,359	60,084	4,600,442
10	2019	4,349,013	60,012	4,409,025
10	2021/2022 Capacity Price (\$/MWH)			
11	2016	\$15.12	\$1.65	\$14.94
12	2017	\$16.44	\$0.00	\$16.21
13	2018	\$15.75	\$1.54	\$15.56
13	2019	\$17.08	\$1.09	\$16.86

Energy		Residential	Lighting	Total
14	Load-Weighted LMP (\$/MWH)			
15	2016	\$30.00	\$24.21	\$29.92
16	2017	\$31.44	\$26.33	\$31.37
17	2018	\$41.36	\$32.50	\$41.24
17	2019	\$28.42	\$23.96	\$28.36

Capacity + Energy		Residential	Lighting	Total
18	\$/MWH			
19	2016	\$45.12	\$25.86	\$44.86
20	2017	\$47.89	\$26.33	\$47.58
21	2018	\$57.10	\$34.05	\$56.80
21	2019	\$45.50	\$25.05	\$45.22

Rate Factor		Residential	Lighting
22	2021/2022 Rate Factor		
23	2016	1.0057	0.5763
24	2017	1.0064	0.5534
25	2018	1.0053	0.5994
26	2019	1.0062	0.5539
26	Average	1.0059	0.5708

1/ As of First Incremental Auction for 2021/2022.

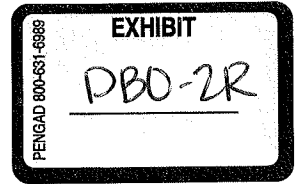


Exhibit DBO- 2R

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

- DSS_b = Company costs may also include the expenses to support time-of-use (“TOU”) programs offered by the Company. Time-of-use expenses will be assigned to the applicable customer class for recovery through this Rider. (C)
- SLR = The costs associated with any Commission-approved solar contracts and its administration will be recovered from the customers in the applicable procurement group(s) that have received an allocation of the AECs associated with the solar contracts. The proceeds of any solar energy, capacity, ancillary services and solar AECs that are acquired and in excess of those allocated to default service suppliers, and sold into the market, will be netted against solar contract costs.
- E = Experienced net over or under collection for each customer procurement group based on the revenue and expense for the six (6) month period ending one-hundred twenty (120) days prior to the end of Application Period. The DSS rate effective June 1 shall include reconciliation of revenue and expense for the six (6) month period October through March. The DSS rate effective December 1 shall include reconciliation of revenue and expense for the six (6) month period April through July. Interest shall be computed monthly at the rate provided for in Title 52 Pa. Code §54.190(c), from the month the over collection or under collection occurs to the effective month that the over collection is refunded or the under collection is recouped.
- S = The Company’s default service retail kWh sales to customers in the applicable Customer Class, projected for the Application Period.
- F = Rate Factor only for the residential and lighting customer groups, updated annually when DSS rates are updated, to become effective June 1st of each year. The Rate Factor shall be 1.0 for all other customer groups. DSS for residential and lighting customer groups will be obtained in the same competitive auction. The Rate Factor adjustment reflects the load shape of the residential and lighting classes. The Rate Factor will be as follows for each Application Period. (C)
(C)
(C)

Application Period	Residential	Lighting
June 1, 2021 through May 31, 2022	X.XXXX	X.XXXX
June 1, 2022 through May 31, 2023	X.XXXX	X.XXXX
June 1, 2023 through May 31, 2024	X.XXXX	X.XXXX
June 1, 2024 through May 31, 2025	X.XXXX	X.XXXX

(C)
(C)
(C)
(C)

- T = The Pennsylvania gross receipts tax rate in effect during the billing month, expressed in decimal form.

The rate shall become effective for default supply service rendered on and after the beginning of the Application Period unless otherwise ordered by the Commission, and shall remain in effect for the effective periods defined above, unless revised on an interim basis subject to the approval of the Commission. Pursuant to 52 Pa. Code §69.1809(c), upon determination that the DSS, if left unchanged, would result in a material over or undercollection of supply-related costs incurred or expected to be incurred during the effective period, the Company may file with the Commission for an interim revision of the DSS to become effective thirty (30) days from the date of filing, unless otherwise ordered by the Commission.

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued) (C)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

CALCULATION OF RATE – ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM (C)

DSS Electric Vehicle Time-of-Use Pilot Program (“DSS EV-TOU”) rates shall be supplied via the same fixed price, full requirements (“FPFR”) products that provide default service supply for the applicable customer class. The DSS EV-TOU rates will be distinguished by three time periods throughout the year. The Off-Peak Period will consist of all hours every day from 11:00 PM through 6:00 AM. The On-Peak Period will consist of all hours every day from 1:00 PM through 9:00 PM. All other hours will be included in the Shoulder Period. The same On-Peak, Off-Peak, and Shoulder Periods will be applicable to all eligible DSS EV-TOU service customers. (C)

The DSS EV-TOU rates shall be filed with the Commission no less than sixty (60) days prior to the start of the next Application Period as defined under the Default Service Supply Rate section of this Rider. Rates are reconciled on a semi-annual basis in accordance with the Default Service Supply Rate section of this Rider. The rates shall include an adjustment to reconcile revenue and expense for each Application Period. The DSS EV-TOU shall be determined to the nearest one-thousandth of one (1) mill per kilowatt-hour and shall be applied to all kilowatt-hours billed for DSS EV-TOU rates provided during the billing month. (C)

During the pilot program, the DSS EV-TOU rates will apply to all load associated with the applicable meter. (C)

$$DSS = [(CA + SLR + (DSS_a + E)/S) * F * \underline{TOU F} + (DSS_b/S)] * [1/(1 - T)]$$
 (C)

Where: (C)

DSS = Default Service Supply rate as defined above, with the addition of the EV-TOU Rate Factors. (C)

TOU F = EV-TOU Rate Factors (as defined below), updated annually when DSS rates are updated, to become effective June 1st of each year, will be utilized to derive the On-Peak, Shoulder, and Off-Peak rates for the customer class based on its respective energy consumption patterns and capacity requirements, as approved in the Company’s most recent DSP proceeding at Docket No. P-2020-XXXXXXX. (C)

Electric Vehicle Time-of-Use Rate Factors (C)									
Application Period	Residential RS, RH, RA			Small C&I ⁽¹⁾ GS, GM<25, GMH<25			Medium C&I GM & GMH ≥ 25KW < 200 kW		
	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾
June 1, 2021 through May 31, 2022	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2022 through May 31, 2023	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2023 through May 31, 2024	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2024 through May 31, 2025	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX

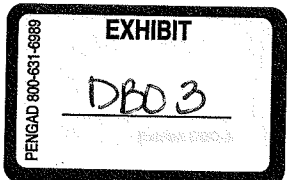
⁽¹⁾Rate Schedule UMS is not eligible for the Electric Vehicle Time-of-Use Pilot Program.

⁽²⁾Denotes On-Peak

⁽³⁾Denotes Shoulder

⁽⁴⁾Denotes Off-Peak

(C) – Indicates Change



Duquesne Light Company
 Default Service Supply Plan - June 1, 2021 through May 31, 2025
 Illustrative Example - Derivation of Residential EV TOU Default Service Supply Bi-Annual Rate Adjustment

		Residential Classes (RS, RH, RA)	On Peak Residential Classes (RS, RH, RA)	Shoulder Residential Classes (RS, RH, RA)	Off Peak Residential Classes (RS, RH, RA)	
1	Competitive Auction Average Wholesale Price (\$/MWh)	\$50.00 /MWh	\$50.00 /MWh	\$50.00 /MWh	\$50.00 /MWh	Weighted bid price (Note 1)
2	Line Losses - T & D	6.9%				Transmission (0.8%), distribution (6.1%)
3	Price Adjustment for Losses (\$/MWh)	\$3.45 /MWh	\$3.45 /MWh	\$3.45 /MWh	\$3.45 /MWh	Line 1 * Line 2
4	Adjusted Wholesale Price for Losses (\$/MWh)	\$53.45 /MWh	\$53.45 /MWh	\$53.45 /MWh	\$53.45 /MWh	Line 1 + Line 3
5	Solar Contract Cost	\$0.00 /MWh	\$0.00 /MWh	\$0.00 /MWh	\$0.00 /MWh	Estimated expenses for solar contract costs per order at Docket No. XXX.
6	Forecast POLR Sales (MWh)	1,361,000				Forecast Residential & Lighting default service sales (MWh)(Note 3)
7	Outside Services Fees	\$64,615				Outside services to conduct Competitive Auctions (Note 3)
8	Default Service Costs	\$576,179				Amortization of 6 months of default service costs per order at Docket No. XXX. (Note 3)
9	Administrative Adder (\$/MWh)	\$0.47 /MWh	\$0.47 /MWh	\$0.47 /MWh	\$0.47 /MWh	(Line 7 + Line 8) / Line 6
10	Reconciliation Adjustment	(\$50,000)				(Over)/under collection including interest (Note 1)
11	Forecast POLR Sales (MWh)	1,361,000				Line 6
12	E Factor Rate (\$/MWh)	(\$0.04) /MWh	(\$0.04) /MWh	(\$0.04) /MWh	(\$0.04) /MWh	Line 10 / Line 11
13	Adjusted Wholesale Price (\$/MWh)	\$53.88 /MWh	\$53.88 /MWh	\$53.88 /MWh	\$53.88 /MWh	Line 4 + Line 5 + Line 9 + Line 12
14	Residential/Lighting Rate Factor	1.0059	1.0059	1.0059	1.0059	Exhibit DBO-2
15	EV TOU Rate Factor		1.65	0.65	0.47	Exhibit DBO-4
16	Adjusted Wholesale Price for Rate Factor (\$/MWh)	\$54.20 /MWh	\$89.43 /MWh	\$35.23 /MWh	\$25.47 /MWh	Line 13 * Line 14 * Line 15
17	TOU Program Expenses	\$44,667				Note 1
18	Forecast POLR Sales (MWh)	1,000,000				Forecast Residential default service sales (MWh)(Note 1)
19	TOU Adder (\$/MWh)	\$0.04 /MWh	\$0.04 /MWh	\$0.04 /MWh	\$0.04 /MWh	Line 17 / Line 18
20	Total Adjusted Wholesale Price (\$/MWh)	\$54.24 /MWh	\$89.47 /MWh	\$35.27 /MWh	\$25.52 /MWh	Line 16 + Line 19
21	PA GRT @ 5.9%	\$3.40 /MWh	\$5.61 /MWh	\$2.21 /MWh	\$1.60 /MWh	Line 20 * (.059/(1-.059))
22	Total Retail Rate (\$/MWh)	\$57.64 /MWh	\$95.08 /MWh	\$37.48 /MWh	\$27.12 /MWh	Line 20 + Line 21
23	Default Service Supply Rate	5.7642 ¢/kWh	9.5081 ¢/kWh	3.7483 ¢/kWh	2.7118 ¢/kWh	Line 22 / 10 (Note 2)

1/ For illustrative purposes only.
 2/ Lighting class supply rate will be applied to monthly kWh consumption of each fixture in rate classes SM, SH and PAL to derive monthly fixed default service supply charge per fixture.
 3/ Annual illustrative estimates shown in DBO-5.

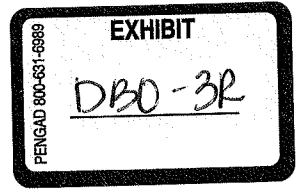


Exhibit DBO- 3R

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM Duquesne will purchase the accounts receivable, without recourse, associated with EGS sales of retail electric commodity, composed of generation and transmission services, to residential customers and commercial and industrial ("C&I") customers with monthly metered demand less than 300 kW within Duquesne's service territory. Eligible customers are those customers taking delivery service under the Company's retail tariff Rate RS, RH, RA, GS/GM and GMH, and who purchase their electric commodity requirements from the EGS through consolidated billing with the Company. Upon request, an EGS shall provide a written certification to Duquesne that the EGS is providing only basic electric supply to residential customers billed through consolidated billing with the Company. Commercial and industrial customers will be separated into two categories for purposes of the Purchase Price Discount discussed in Section 12.1.7.2. Small C&I customers will be those customers with monthly metered demand less than 25 kW and Medium C&I customers will be those customers with monthly metered demand equal to or greater than 25 kW. The classification of customers as less than or equal to or greater than 25 kW is discussed in detail in the Company's retail tariff Rate GS/GM and Rate GMH. Under the POR program, Duquesne will reimburse EGSs for their customer billings regardless of whether Duquesne receives payment from the customer, subject to the limitations set forth below. Duquesne will seek to recover the EGS receivables from EGS customers consistent with Duquesne's existing collection procedures for recovery of billings to default service customers, and incur any uncollectible costs related to billings for EGSs. The term of the POR program defined herein will become effective June 1, 2021, and will remain in effect as described and will terminate on May 31, 2025.

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12.1.7.1 ELIGIBILITY REQUIREMENTS EGSs that choose Duquesne's consolidated billing option for all or a portion of their eligible customer accounts will be required to sell their accounts receivable to Duquesne for those customers for whom Duquesne issues a consolidated bill. (EGSs may continue to issue their own bills through Dual Billing for commodity service, for all or a portion of their customers, but will not be eligible to participate in the POR program for those customers that receive Dual Billing.) EGSs may choose to participate in the POR program with consolidated billing at any time during the term of the POR program as long as the EGS does not remove customer accounts from consolidated billing. A customer whose service is terminated or who voluntarily switches from the EGS' service to another generation provider is not considered to have been removed by the EGS from consolidated billing and the POR program.

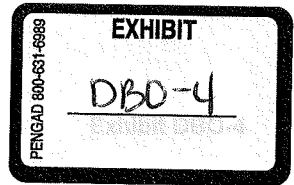
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EGSs participating in this POR program will agree not to reject for enrollment a new customer covered by the program based on credit-related issues. Any customer who wishes to be served by an EGS participating in the POR program will be accepted by the EGS if that EGS is actively serving the rate class to which that customer belongs.

12.1.7.2 PURCHASE PRICE DISCOUNT Participating EGSs' applicable electric commodity receivables will be purchased at a discount. The discount rate will be 0.10% for incremental, ongoing operating and administrative expenses associated with the POR Program related to these customers.

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(C) – Indicates Change



Duquesne Light Company
Default Service Supply Plan - June 1, 2021 to May 31, 2025
Derivation of EV-TOU Supply Rate Factors: Residential and Lighting

Capacity		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>	<u>Total</u>
1	Capacity Obligation (MW-day)				
2	2016	482,908	0	0	482,908
3	2017	486,145	0	0	486,145
4	2018	509,705	0	0	509,705
5	2019	529,330	0	0	529,330
5	2021/2022 Capacity Price (\$/MW-day) (1)	\$140.45	\$140.45	\$140.45	\$140.45
6	Load (MWH)				
7	2016	1,799,054	1,655,579	1,086,034	4,540,667
8	2017	1,655,668	1,538,216	1,018,012	4,211,896
9	2018	1,813,747	1,664,685	1,122,010	4,600,442
10	2019	1,739,120	1,598,905	1,071,000	4,409,025
10	2021/2022 Capacity Price (\$/MWH)				
11	2016	\$37.70	\$0.00	\$0.00	\$14.94
12	2017	\$41.24	\$0.00	\$0.00	\$16.21
13	2018	\$39.47	\$0.00	\$0.00	\$15.56
13	2019	\$42.75	\$0.00	\$0.00	\$16.86

Energy		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>	<u>Total</u>
14	Load-Weighted LMP (\$/MWH)				
15	2016	\$36.85	\$28.74	\$20.25	\$29.92
16	2017	\$37.62	\$30.29	\$22.83	\$31.37
17	2018	\$50.62	\$40.27	\$27.53	\$41.24
17	2019	\$33.94	\$27.38	\$20.73	\$28.36

Capacity + Energy		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>	<u>Total</u>
18	\$/MWH				
19	2016	\$74.55	\$28.74	\$20.25	\$44.86
20	2017	\$78.87	\$30.29	\$22.83	\$47.58
21	2018	\$90.09	\$40.27	\$27.53	\$56.80
21	2019	\$76.69	\$27.38	\$20.73	\$45.22

Rate Factor		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>
22	2021/2022 Rate Factor			
23	2016	1.66	0.64	0.45
24	2017	1.66	0.64	0.48
25	2018	1.59	0.71	0.48
26	2019	1.70	0.61	0.46
26	Average	1.65	0.65	0.47

1/ As of First Incremental Auction for 2021/2022.

Duquesne Light Company
 Default Service Supply Plan - June 1, 2021 to May 31, 2025
 Derivation of EV-TOU Supply Rate Factors: Small Commercial and Industrial

Exhibit DBO-4

Capacity		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>	<u>Total</u>
1	Capacity Obligation (MW-day)				
2	2016	63,939	0	0	63,939
3	2017	61,869	0	0	61,869
4	2018	66,970	0	0	66,970
5	2019	79,692	0	0	79,692
5	2021/2022 Capacity Price (\$/MW-day) (1)	\$140.45	\$140.45	\$140.45	\$140.45
6	Load (MWH)				
7	2016	288,076	288,300	154,812	731,188
8	2017	266,691	269,117	144,516	680,324
9	2018	297,433	302,067	169,558	769,058
10	2019	337,023	343,637	206,776	887,436
10	2021/2022 Capacity Price (\$/MWH)				
11	2016	\$31.17	\$0.00	\$0.00	\$12.28
12	2017	\$32.58	\$0.00	\$0.00	\$12.77
13	2018	\$31.62	\$0.00	\$0.00	\$12.23
13	2019	\$33.21	\$0.00	\$0.00	\$12.61

Energy		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>	<u>Total</u>
14	Load-Weighted LMP (\$/MWH)				
15	2016	\$35.73	\$29.03	\$20.11	\$29.78
16	2017	\$36.51	\$30.42	\$22.61	\$31.15
17	2018	\$48.89	\$39.84	\$26.90	\$40.49
17	2019	\$33.11	\$27.46	\$20.55	\$28.00

Capacity + Energy		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>	<u>Total</u>
18	\$/MWH				
19	2016	\$66.91	\$29.03	\$20.11	\$42.07
20	2017	\$69.10	\$30.42	\$22.61	\$43.92
21	2018	\$80.52	\$39.84	\$26.90	\$52.72
21	2019	\$66.32	\$27.46	\$20.55	\$40.61

Rate Factor		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>
22	2021/2022 Rate Factor			
23	2016	1.59	0.69	0.48
24	2017	1.57	0.69	0.51
25	2018	1.53	0.76	0.51
26	2019	1.63	0.68	0.51
26	Average	1.58	0.70	0.50

1/ As of First Incremental Auction for 2021/2022.

Duquesne Light Company
 Default Service Supply Plan - June 1, 2021 to May 31, 2025
 Derivation of EV-TOU Supply Rate Factors: Medium Commercial and Industrial

Exhibit DBO-4

Capacity		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>	<u>Total</u>
1	Capacity Obligation (MW-day)				
2	2016	220,376	0	0	220,376
3	2017	224,631	0	0	224,631
4	2018	219,660	0	0	219,660
5	2019	205,735	0	0	205,735
5	2021/2022 Capacity Price (\$/MW-day) (1)	\$140.45	\$140.45	\$140.45	\$140.45
6	Load (MWH)				
7	2016	1,001,696	1,076,681	623,894	2,702,271
8	2017	994,889	1,078,109	620,596	2,693,593
9	2018	998,778	1,080,512	623,816	2,703,106
10	2019	762,437	815,715	467,805	2,045,958
10	2021/2022 Capacity Price (\$/MWH)				
11	2016	\$30.90	\$0.00	\$0.00	\$11.45
12	2017	\$31.71	\$0.00	\$0.00	\$11.71
13	2018	\$30.89	\$0.00	\$0.00	\$11.41
13	2019	\$37.90	\$0.00	\$0.00	\$14.12

Energy		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>	<u>Total</u>
14	Load-Weighted LMP (\$/MWH)				
15	2016	\$35.61	\$28.94	\$20.00	\$29.35
16	2017	\$36.54	\$30.29	\$22.42	\$30.78
17	2018	\$48.98	\$40.08	\$26.93	\$40.33
17	2019	\$32.32	\$27.83	\$20.93	\$27.93

Capacity + Energy		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>	<u>Total</u>
18	\$/MWH				
19	2016	\$66.51	\$28.94	\$20.00	\$40.80
20	2017	\$68.25	\$30.29	\$22.42	\$42.50
21	2018	\$79.87	\$40.08	\$26.93	\$51.75
21	2019	\$70.22	\$27.83	\$20.93	\$42.05

Rate Factor		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>
22	2021/2022 Rate Factor			
23	2016	1.63	0.71	0.49
24	2017	1.61	0.71	0.53
25	2018	1.54	0.77	0.52
26	2019	1.67	0.66	0.50
26	Average	1.61	0.71	0.51

1/ As of First Incremental Auction for 2021/2022.

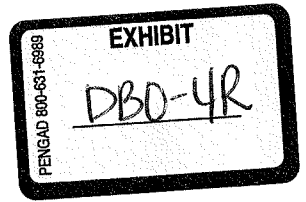


Exhibit DBO- 4R

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM Duquesne will purchase the accounts receivable, without recourse, associated with EGS sales of retail electric commodity, composed of generation and transmission services, to residential customers and commercial and industrial (“C&I”) customers with monthly metered demand less than 300 kW within Duquesne’s service territory. Eligible customers are those customers taking delivery service under the Company’s retail tariff Rate RS, RH, RA, GS/GM and GMH, and who purchase their electric commodity requirements from the EGS through consolidated billing with the Company. Upon request, an EGS shall provide a written certification to Duquesne that the EGS is providing only basic electric supply to residential customers billed through consolidated billing with the Company. Commercial and industrial customers will be separated into two categories for purposes of the Purchase Price Discount discussed in Section 12.1.7.2. Small C&I customers will be those customers with monthly metered demand less than 25 kW and Medium C&I customers will be those customers with monthly metered demand equal to or greater than 25 kW. The classification of customers as less than or equal to or greater than 25 kW is discussed in detail in the Company’s retail tariff Rate GS/GM and Rate GMH. Under the POR program, Duquesne will reimburse EGSs for their customer billings regardless of whether Duquesne receives payment from the customer, subject to the limitations set forth below. Duquesne will seek to recover the EGS receivables from EGS customers consistent with Duquesne’s existing collection procedures for recovery of billings to default service customers, and incur any uncollectible costs related to billings for EGSs. The term of the POR program defined herein will become effective June 1, 2021, and will remain in effect as described and will terminate on May 31, 2025.

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12.1.7.1 ELIGIBILITY REQUIREMENTS EGSs that choose Duquesne’s consolidated billing option for all or a portion of their eligible customer accounts will be required to sell their accounts receivable to Duquesne for those customers for whom Duquesne issues a consolidated bill. (EGSs may continue to issue their own bills through Dual Billing for commodity service, for all or a portion of their customers, but will not be eligible to participate in the POR program for those customers that receive Dual Billing.) EGSs may choose to participate in the POR program with consolidated billing at any time during the term of the POR program as long as the EGS does not remove customer accounts from consolidated billing. A customer whose service is terminated or who voluntarily switches from the EGS’ service to another generation provider is not considered to have been removed by the EGS from consolidated billing and the POR program.

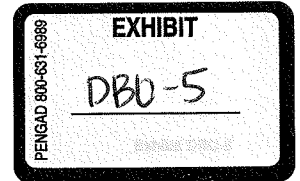
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EGSs participating in this POR program will agree not to reject for enrollment a new customer covered by the program based on credit-related issues. Any customer who wishes to be served by an EGS participating in the POR program will be accepted by the EGS if that EGS is actively serving the rate class to which that customer belongs.

12.1.7.2 PURCHASE PRICE DISCOUNT Participating EGSs’ applicable electric commodity receivables will be purchased at a discount. The discount rate will be 0.10% for incremental, ongoing operating and administrative expenses associated with the POR Program related to these customers.

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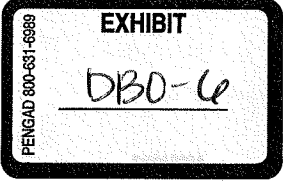
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Duquesne Light Company
 Default Service Plan June 1, 2021 to May 31, 2025
 Estimated Default Service Preparation and Implementation Costs [1]

Line	Item	Current Recovery Mechanism	Proposed Recovery Mechanism	Description	A = (B * 4)	B = (C+D+E+F)	Forecasted Annual Default Service Costs by Customer Class			
					Total Estimated	Annualized Estimated	Residential & Lighting Fixed Product	Small C&I Fixed Product	Medium C&I Fixed Product	Medium & Large C&I HPS Product
					Costs	Costs				
1	Competitive Auction Process and Evaluation [2]	Default Service Supply Rates	Default Service Supply Rates (Direct Assignment)	Consulting services for independent evaluator to conduct competitive auctions (reoccurring)	\$1,680,000	\$420,000	\$129,231	\$129,231	\$129,231	\$32,308
2	EV TOU Program [3]	Default Service Supply Rates	Default Service Supply Rates (Direct Assignment)	Implement and maintain TOU rates supplied by EGSS	\$227,900	\$92,600	\$89,333	\$1,333	\$1,333	\$0
3	Net Metering Payout [4]	Default Service Supply Rates	Default Service Supply Rates & Transmission Service Charge (Direct Assignment)	Payouts for Net Metering Customers	\$308,000	\$77,000	\$58,000	\$3,000	\$16,000	\$0
4	Forecasted POLR Sales (MWh) - 6.1.2021 - 5.31.2022						2,722,000	480,600	542,600	303,500
5	Default Service Costs									
6	Filing Preparation and Approval Process	Distribution Base Rates	Default Service Supply Rates (Allocated on forecasted POLR MWhs)	Consulting services and outside counsel to help prepare filing and throughout regulatory process	\$792,828	\$198,207	\$133,257	\$23,528	\$26,563	\$14,858
7	Working Capital for Default Service Supply [5]	Distribution Base Rates	Default Service Supply Rates (Allocated on forecasted POLR MWhs)	Costs associated with lag in time between the utility's out-of-pocket payment expenses and the collection of revenues for default service	\$6,063,235	\$1,515,809	\$1,019,100	\$179,934	\$203,146	\$113,629
8	Administration of Hourly Price Default Service	Default Service Supply Rates	Default Service Supply Rates (Direct Assignment)	Administrative adder for HPS customers on default service.	\$600,000	\$150,000	\$0	\$0	\$0	\$150,000
9	Solar Contract Costs	Default Service Supply Rates	Default Service Supply Rates (Direct Assignment)	Consulting services for independent evaluator to conduct Solar Competitive Auctions.	\$75,000	[6]				
10	Total (Line 1 + Line 4 + Line 5 + Line 6)				\$9,746,963	\$2,453,616	\$1,428,921	\$337,026	\$376,274	\$310,794

1/ All costs subject to change depending on final order and implementation costs.
 2/ The estimated Independent Market Monitor costs have remained flat.
 3/ The total four year estimated costs are from Statement No. 5, Exhibit KS-X. The annualized estimates represent the first year of the plan.
 4/ Estimated Net Metering payouts based on payouts at May 31, 2019.
 5/ Assuming the Company's pre-tax weighted cost of capital of ~10.49%, the revenue requirement (annual expense) associated with DSS working capital is \$1,515,809 [\$14,451,988 multiplied by ~10.49% return]. The cash working capital cost of \$14,451,988 is based on the supply related working capital costs excluded from distribution base rates in the Company's base rate proceeding at Docket No. R-2018-3000124 on Exhibit 6-1, page 2 of 6, line 66.
 6/ Dependent on length of contract.



Duquesne Light Company
 Default Service Supply Plan - June 1, 2021 through May 31, 2025
 Illustrative Example - 1307(e) Statement - Residential Default Service Supply Reconciliation of Revenue and Expense

Revenue	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Total 6 Mos. Ended 7/31/2021	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Total 6 Mos. Ended 1/31/2022	Total 7/1/2021 to 3/31/2022
1 Calendar Month Retail Revenue	\$13,000,000	\$14,000,000	\$11,000,000	\$11,000,000	\$13,000,000	\$21,000,000	\$88,000,000	\$17,000,000	\$15,000,000	\$11,000,000	\$13,000,000	\$14,000,000	\$13,000,000	\$83,000,000	\$166,000,000
2 Less Factor Rate Revenue	(\$400,000)	(\$400,000)	(\$300,000)	(\$300,000)	(\$200,000)	(\$300,000)	(\$1,900,000)	(\$200,000)	(\$200,000)	(\$100,000)	(\$100,000)	(\$100,000)	(\$100,000)	(\$800,000)	(\$2,700,000)
3 Net Calendar Month Revenue	\$12,600,000	\$13,600,000	\$10,700,000	\$10,700,000	\$12,800,000	\$20,700,000	\$86,100,000	\$16,800,000	\$14,800,000	\$10,900,000	\$12,900,000	\$13,900,000	\$12,900,000	\$82,200,000	\$163,300,000
4 Less PA Gross Receipts Tax (GRT) at 5.9%	\$790,600	\$849,600	\$666,700	\$666,700	\$778,800	\$1,256,700	\$5,009,100	\$1,014,800	\$896,800	\$654,900	\$772,900	\$831,900	\$772,900	\$4,944,200	\$9,953,300
5 Net Calendar Month Revenue less GRT	\$11,809,400	\$12,750,400	\$10,033,300	\$10,033,300	\$12,021,200	\$19,443,300	\$79,890,900	\$15,785,200	\$13,903,200	\$10,245,100	\$12,127,100	\$13,068,100	\$12,127,100	\$77,255,800	\$153,346,700
Expenses															
6 Supply Invoice Amount	\$13,000,000	\$13,000,000	\$9,000,000	\$11,000,000	\$13,000,000	\$19,000,000	\$78,000,000	\$16,000,000	\$14,000,000	\$11,000,000	\$12,000,000	\$13,000,000	\$13,000,000	\$79,000,000	\$157,000,000
7 Administrative Expense (2)	\$625	\$625	\$65,000	\$625	\$625	\$625	\$3,750	\$625	\$625	\$65,000	\$625	\$625	\$625	\$3,750	\$13,625
8 Net Metering Expenses (3)	\$45,742	\$45,742	\$0	\$45,742	\$0	\$45,742	\$182,968	\$45,742	\$45,742	\$0	\$45,742	\$45,742	\$45,742	\$182,968	\$365,936
9 Filing Preparation and Approval Process Expense (4)	\$11,376	\$11,376	\$11,376	\$11,376	\$11,376	\$11,376	\$68,256	\$11,376	\$11,376	\$11,376	\$11,376	\$11,376	\$11,376	\$68,256	\$136,512
10 Working Capital for Default Service Supply Expense (4)	\$87,002	\$87,002	\$87,002	\$87,002	\$87,002	\$87,002	\$522,012	\$87,002	\$87,002	\$87,002	\$87,002	\$87,002	\$87,002	\$522,012	\$1,044,024
11 Total Expense	\$13,299,000	\$13,299,000	\$9,163,376	\$11,092,000	\$13,144,746	\$19,259,000	\$78,704,137	\$16,099,125	\$14,099,000	\$11,168,376	\$12,099,000	\$13,099,000	\$13,099,000	\$79,660,163	\$158,104,300
12 (Over)/Under Collection	\$489,603	(\$451,397)	(\$1,459,922)	\$465,703	\$773,546	(\$844,297)	(\$1,186,763)	(\$85,875)	(\$204,197)	\$718,278	(\$222,159)	(\$168,827)	\$772,139	\$804,363	(\$387,400)
13 Interest Rate (5)	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%		5.00%	5.00%	5.00%	5.00%	5.00%	5.00%		
14 Interest Weight	13/12	12/12	13/12	10/12	9/12	8/12		13/12	12/12	11/12	10/12	9/12	8/12		
15 Interest	\$76,520	(\$22,570)	(\$67,371)	\$19,404	\$27,133	(\$31,477)	(\$48,360)	(\$6,652)	(\$10,210)	\$32,921	(\$9,465)	(\$6,331)	\$25,738	\$28,002	(\$20,359)
16 Total (Over)/Under Collection	\$516,124	(\$473,966)	(\$1,527,293)	\$485,108	\$750,678	(\$975,773)	(\$1,235,123)	(\$90,527)	(\$214,406)	\$751,199	(\$236,621)	(\$175,158)	\$797,877	\$832,365	(\$407,759)

(1) Reconciliation periods aligned with the Company's default service supply plan effective June 1, 2021. Reconciliation periods defined in Company tariff Rider No. 8, Default Service Supply.
 (2) Administrative fees to conduct the competitive auctions.
 (3) Reflects the supply component of the net metering compensation paid to customer-generators.
 (4) Reflects the unbundling provisions of the Joint Petition for Approval of Non-Unanimous Settlement that was adopted as part of the Commission order entered December 22, 2016 at Docket No. P-2016-2543140. The unbundled expenses will be fixed and reconciled only for differences between projected and actual consumption. Appendix C of the Joint Petition for Approval of Non-Unanimous Settlement reflects, by customer class, the allocated fixed dollar amounts for filing preparation and working capital for default service supply. This has been updated as part of the Commission rate case order entered on December 20, 2018 at Docket No. R-2018-3000124 per page 19, paragraph 44.
 (5) Interest rate per Section 54 Pa. Code 54.190(c).

Duquesne Light Company
 Default Service Supply Plan - June 1, 2021 through May 31, 2025
 Illustrative Example - 1307(e) Statement - Transmission Reconciliation of Revenue and Expense

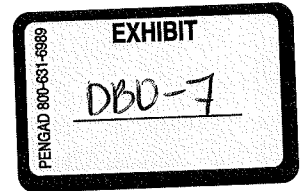
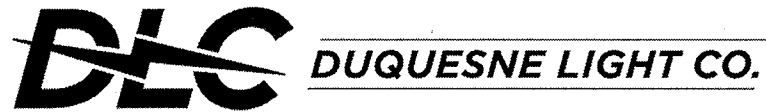
Exhibit DBO-6

	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Total
Revenue													
1 Total POLR Transmission Revenue	\$4,773,698	\$3,937,087	\$4,909,922	\$5,647,219	\$7,916,473	\$6,901,418	\$5,881,696	\$4,331,044	\$2,991,419	\$3,868,124	\$4,123,879	\$3,429,622	\$58,712,602
2 Less E-Factor Revenue	(\$128,212)	(\$114,201)	(\$174,750)	(\$117,585)	(\$160,076)	(\$140,450)	(\$120,283)	(\$1,483,675)	(\$1,495,783)	(\$1,673,894)	(\$1,791,042)	(\$1,513,737)	(\$8,913,678)
3 POLR Transmission Revenue	\$4,901,911	\$4,051,288	\$5,084,672	\$5,764,784	\$8,076,549	\$7,041,868	\$6,001,990	\$5,814,719	\$4,487,202	\$5,543,018	\$5,914,921	\$4,943,359	\$67,626,281
4 POLR Transmission Retail Revenue	\$4,901,911	\$4,051,288	\$5,084,672	\$5,764,784	\$8,076,549	\$7,041,868	\$6,001,990	\$5,814,719	\$4,487,202	\$5,543,018	\$5,914,921	\$4,943,359	\$67,626,281
5 Less PA Gross Receipts Tax (GRT)	\$289,213	\$239,026	\$299,996	\$340,122	\$478,516	\$415,470	\$354,117	\$343,068	\$264,745	\$327,038	\$348,980	\$291,658	\$3,989,951
6 Net POLR Transmission Revenue	\$4,612,698	\$3,812,262	\$4,784,677	\$5,424,662	\$7,600,033	\$6,626,398	\$5,647,872	\$5,471,651	\$4,222,457	\$5,215,979	\$5,565,941	\$4,651,701	\$63,636,331
Expenses													
7 Network Integration Transmission Service Expense	\$4,171,588	\$4,038,476	\$4,177,230	\$4,375,148	\$4,525,517	\$4,534,470	\$4,409,253	\$4,561,884	\$4,430,119	\$4,603,348	\$4,812,262	\$4,359,262	\$52,998,557
8 Reliability Must Run (RMR)	\$2,619	\$2,804	\$2,811	\$2,027	\$2,808	\$2,811	\$2,810	\$2,829	\$2,927	\$2,843	\$2,954	\$2,604	\$33,048
9 Deferred Tax Adjustment Charge	\$77,834	\$77,863	\$77,940	\$77,757	\$77,835	\$77,988	\$78,363	\$78,461	\$78,734	\$79,174	\$79,429	\$79,661	\$941,040
10 Ancillary Service Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11 PJM Administrative Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12 Other PJM Expense	\$378,547	\$301,380	\$359,698	\$467,190	\$340,522	\$341,195	\$342,833	\$395,825	\$352,627	\$349,568	\$315,101	\$316,093	\$4,260,580
13 Net Metering Expense (1)	\$0	\$0	\$0	\$10,973	\$0	\$83	\$0	\$372	\$61	\$54	\$23	\$0	\$11,575
14 Total Transmission Expenses	\$4,630,569	\$4,420,623	\$4,617,680	\$4,933,094	\$4,946,681	\$4,956,558	\$4,839,359	\$5,039,000	\$4,864,780	\$5,034,993	\$5,209,800	\$4,757,643	\$58,244,800
Over/ (Under) Collection													
15 Net (Over)/Under Collection	\$17,890	\$608,360	(\$166,997)	(\$491,587)	(\$2,653,351)	(\$1,689,840)	(\$814,514)	(\$432,651)	\$642,323	(\$180,986)	(\$356,141)	\$105,943	(\$5,391,531)
16 Interest	\$1,434	\$48,162	(\$12,560)	(\$36,874)	(\$187,946)	(\$111,329)	(\$51,246)	(\$26,500)	\$36,511	(\$9,680)	(\$17,858)	\$4,855	(\$363,131)
17 Total (Over)/Under Collection	\$19,324	\$656,522	(\$179,557)	(\$528,461)	(\$2,841,297)	(\$1,781,169)	(\$865,760)	(\$459,151)	\$678,834	(\$190,666)	(\$374,099)	\$110,797	(\$5,754,662)

(1) Reflects the transmission component of the net metering compensation paid to customer generators

EXHIBIT NO. DBO-7

SUPPLEMENT NO. X
TO ELECTRIC – PA. P.U.C. NO. 25



SCHEDULE OF RATES

For Electric Service in Allegheny and Beaver Counties

(For List of Communities Served, see Pages No. 4 and 5)

Issued By

DUQUESNE LIGHT COMPANY

411 Seventh Avenue
Pittsburgh, PA 15219

Steven E. Malnight

President and Chief Executive Officer

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

Issued in compliance with
Commission Order dated XXXXXXXX XX, XXXX at Docket No. P-2020-XXXXXXX.

NOTICE

**THIS TARIFF SUPPLEMENT UPDATES THE TABLE OF CONTENTS, ADDS PAGES AND
MODIFIES AN EXISTING RULE AND EXISTING RIDERS**

See Page Two

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

List of Modifications Made By This Tariff

Page No. 2A through Page No. 2E

Page No. 2A through Page No. 2E have been added to Tariff No. 25 to accommodate the List of Modifications.

Page No. 98A has been added to Rider No. 8 – Default Service Supply and therefore to Tariff No. 25

Page No. 104A has been added to Rider No. 8 – Default Service Supply and therefore to Tariff No. 25.

Page No. 136A has been added to Rider No 21 – Net Metering Service and therefore to Tariff No. 25.

Table of Contents

**Second Revised Page No. 3
Cancelling First Revised Page No. 3**

Page No. 136A has been added to Rider No. 21 – Net Metering Service and to the Table of Contents in Tariff No. 25.

Rule No. 18.1 Electric Vehicle Charging

**First Revised Page No. 26
Cancelling Original Page No. 26**

Language has been added to provide clarity for purposes of defining electric vehicles as described in Rule No. 18.1.

Rider No. 8 – Default Service Supply

**First Revised Page No. 98
Cancelling Original Page No. 98**

Language has been updated to remove “a request for proposal” and replace it with “competitive auctions” to reflect current business practice.

Rider No. 8 – Default Service Supply

**First Revised Page No. 98
Cancelling Original Page No. 98**

Eligibility language has been added regarding the Company's proposed Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”).

Rider No. 8 – Default Service Supply

**First Revised Page No. 98
Cancelling Original Page No. 98**

The Residential (Rate Schedules RS, RH and RA) Table has been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 8 – Default Service Supply

**First Revised Page No. 98
Cancelling Original Page No. 98**

The Residential (Rate Schedules RS, RH and RA) Table has been modified to include an "Electric Vehicle Time-of-Use Pilot Program" section.

A footnote has been added to describe the proposed Electric Vehicle Time-of-Use Pilot Program ("EV-TOU").

Rider No. 8 – Default Service Supply

**First Revised Page No. 98
Cancelling Original Page No. 98**

The Small C&I with monthly metered demand less than 25 kW (Rate Schedules GS/GM, GMH and UMS) Table has been moved from Original Page No. 98 to Original Page No. 98A to accommodate the addition of the eligibility language regarding the Company's proposed Electric Vehicle Time-of-Use Pilot Program ("EV-TOU").

Rider No. 8 – Default Service Supply

Original Page No. 98A

The Small C&I with monthly metered demand less than 25 kW (Rate Schedules GS/GM, GMH and UMS) Table has been moved to Original Page No. 98A from Original Page No. 98 to accommodate the addition of the eligibility language regarding the Company's proposed Electric Vehicle Time-of-Use Pilot Program ("EV-TOU").

Rider No. 8 – Default Service Supply

Original Page No. 98A

The Small C&I with monthly metered demand less than 25 kW (Rate Schedules GS/GM, GMH and UMS) Table has been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

Rider No. 8 – Default Service Supply

Original Page No. 98A

The Small C&I with monthly metered demand less than 25 kW (Rate Schedules GS/GM, GMH and UMS) Table has been modified to include an "Electric Vehicle Time-of-Use Pilot Program" section applicable to Rate Schedules GS/GM and GMH.

Footnotes have been added to describe the proposed Electric Vehicle Time-of-Use Pilot Program ("EV-TOU").

Rider No. 8 – Default Service Supply

**Second Revised Page No. 99
Cancelling First Revised Page No. 99**

The Medium C&I with monthly metered demand equal to or greater than 25 kW (Rates Schedules GS/GM and GMH) and Lighting (Rate Schedules AL and SE) Tables have been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 8 – Default Service Supply

**Second Revised Page No. 99
Cancelling First Revised Page No. 99**

The Medium C&I with monthly metered demand equal to or greater than 25 kW (Rates Schedules GS/GM and GMH) Table has been modified to include an “Electric Vehicle Time-of-Use Pilot Program” section.

A footnote has been added to describe the proposed Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”).

Rider No. 8 – Default Service Supply

**First Revised Page No. 100
Cancelling Original Page No. 100**

Rider No. 8 – Default Service Supply

**First Revised Page No. 101
Cancelling Original Page No. 101**

The Lighting (Rate Schedules SM, SH and PAL) Tables have been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

Rider No. 8 – Default Service Supply

**First Revised Page No. 102
Cancelling Original Page No. 102**

Language has been updated to remove “Request for Proposal” and “RFP” and replace it with “competitive auction” to reflect current business practice.

Rider No. 8 – Default Service Supply

**First Revised Page No. 102
Cancelling Original Page No. 102**

Language has been updated to remove “up to 27 MW” and replace it with “for a portion” to reflect the proposed default service plan.

Rider No. 8 – Default Service Supply

**First Revised Page No. 103
Cancelling Original Page No. 103**

Symbols in the formula and the correlating formula detail have been modified to reflect current business practice. “CA” (Competitive Auction) has replaced “RFP” (Request for Proposal).

Rider No. 8 – Default Service Supply

**First Revised Page No. 103
Cancelling Original Page No. 103**

DSS_b/S has been added to the formula to denote the breakout of these costs which were previously recovered in DSS_a.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 8 – Default Service Supply

**First Revised Page No. 103
Cancelling Original Page No. 103**

Language previously in the formula detail for DSS_a has been moved to its own symbol, DSS_b, and now resides on First Revised Page No. 104.

Rider No. 8 – Default Service Supply

**First Revised Page No. 104
Cancelling Original Page No. 104**

Language previously in the formula detail for DSS_a on Original Page No. 103 has been moved to its own symbol, DSS_b, and now resides on First Revised Page No. 104.

Rider No. 8 – Default Service Supply

**First Revised Page No. 104
Cancelling Original Page No. 104**

In the formula detail for “F,” language has been updated to remove “RFP” and replace it with “competitive auction” to reflect current business practice.

Rider No. 8 – Default Service Supply

**First Revised Page No. 104
Cancelling Original Page No. 104**

The Rate Factor Application Period and Adjustment Table has been modified to reflect the proposed default service period.

Rider No. 8 – Default Service Supply

Original Page No. 104A

Original Page No. 104A has been added to Rider No. 8 – Default Service Supply to accommodate the Calculation of Rate – Electric Vehicle Time-of-Use Pilot Program section as well as the formula for the calculation, the formula detail and the Rate Factors Table.

Rider No. 8 – Default Service Supply

**First Revised Page No. 105
Cancelling Original Page No. 105**

Language has been added under the “Annual Reconciliation” section denoting how over/under collections will be calculated in regard to the proposed EV-TOU Pilot Program.

Rider No. 8 – Default Service Supply

**First Revised Page No. 105
Cancelling Original Page No. 105**

Language has been removed under the “Miscellaneous” section pertaining to a TOU pilot program that has concluded.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 9 – Day-Ahead Hourly Price Service

**First Revised Page No. 106
Cancelling Original Page No. 106**

Language has been updated to remove “request for proposal” and “RFP” and replace it with “competitive auction” to reflect current business practice.

Rider No. 9 – Day-Ahead Hourly Price Service

**First Revised Page No. 108
Cancelling Original Page No. 108**

A “Fixed Retail Administrative Charge” (“FRA”) Table has been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

Rider No. 9 – Day-Ahead Hourly Price Service

**First Revised Page No. 109
Cancelling Original Page No. 109**

Language in the Procurement Process section has been updated to remove “request for proposal (“RFP”)” and replace it with “auction” to reflect current business practice.

Rider No. 21 – Net Metering Service

**First Revised Page No. 135
Cancelling Original Page No. 135**

**First Revised Page No. 136
Cancelling Original Page No. 136**

Language has been added to Rider No. 21 – Net Metering Service to provide the Billing Provisions for Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”) Customer Generators.

Rider No. 21 – Net Metering Service

**First Revised Page No. 135
Cancelling Original Page No. 135**

**First Revised Page No. 136
Cancelling Original Page No. 136**

Language in Rider No. 21 – Net Metering Service providing the Net Metering Provisions for Shopping Customers that was previously on Original Page No. 135 has been moved to the middle of First Revised Page No. 136 to accommodate the addition of language for Billing Provisions for Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”) Customer Generators.

Rider No. 21 – Net Metering Service

Original Page No. 136A

Original Page No. 136A has been added to Rider No. 21 – Net Metering Service to provide for the addition and movement of language.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 21 – Net Metering Service

Original Page No. 136A

The Net Metering Provisions for Shopping Customers, Application, Minimum Charge and Riders sections of Rider No. 21 – Net Metering Service that were previously on Original Page No. 136 have been moved to Original Page No. 136A.

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(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

MEASUREMENT AND USE OF SERVICE - (Continued)

17. FLUCTUATIONS AND UNBALANCES The customer's use of electric service shall not cause fluctuating loads or unbalanced loads of sufficient magnitude to impair the service to other customers or to interfere with the proper operation of the Company's facilities. The Company may require the customer to make such changes in his equipment or use thereof, or to install such corrective equipment, as may be necessary to eliminate fluctuating or unbalanced loads; or, where the disturbances caused thereby may be eliminated more economically by changes in or additions to the Company's facilities, the Company will, at the request of the customer, provide the necessary corrective facilities at a reasonable charge. Payment will be made in full in advance for supplying special equipment installed under this Rule.

18. REDISTRIBUTION All electric energy shall be consumed by the customer to whom the Company supplies and delivers such energy, except that (1) the customer owning and operating a separate office building, and (2) any other customer who, upon showing that special circumstances exist, obtains the written consent of the Company may redistribute electric energy to tenants of such customer, but only if such tenants are not required to make a specific payment for such energy.

This Rule shall not affect any practice undertaken prior to June 1, 1965. See Rule No. 41 for special requirements for residential dwelling units in a building.

18.1 ELECTRIC VEHICLE CHARGING Electricity sales by a person, corporation or other entity, not a public utility, owning and operating an electric vehicle charging facility for the sole purpose of recharging an electric vehicle battery for compensation are not construed to be sales to residential consumers and therefore do not fall under the pricing requirements of 66 Pa.C.S. § 1313. Further, for purposes of third party-owned electric vehicle charging stations, charging the electric vehicle shall not be considered redistribution as defined in Rule No. 18 - Redistribution. For the purposes of this Rule No. 18.1, electric vehicles are defined as any vehicle licensed to operate on public roadways that are propelled in whole or in part by electrical energy stored on-board for the purpose of propulsion. Types of electric vehicles include, but are not limited to, plug-in hybrid electric vehicles and battery electric vehicles. Electric vehicle charging stations shall be made in accordance with the Company's "Electric Service Installation Rules," a copy of which may be found at www.duquesnelight.com. The station must be designed to protect for back flow of electricity to the Company's electrical distribution circuit as required by Company rules. The Company shall not be liable for any damages associated with operation of the charging station. For stations dedicated solely for the purpose of charging electric vehicles wherein a third party owns the charger and allows an electric vehicle owner to use their facility to charge an electric vehicle, the owner of the charging facility shall notify the Company at least one hundred twenty (120) days in advance of the planned installation date and may be required to install metering for the station as determined by the Company. The third party owner of the station shall be responsible for all applicable Tariff rates, fees and charges. For such installations, the electric vehicle owner shall be responsible for all fees imposed by the owner of the station for charging the electric vehicle.

(C)

19. CONTINUITY AND SAFETY The Company will use all reasonable care to provide safe and continuous delivery of electricity but shall not be liable for any damages arising through interruption of the delivery of electricity or for injury to persons or property resulting from the use of the electricity delivered.

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

Default Service Supply (“DSS”) provides residential, commercial, industrial and lighting customers on the applicable rate schedules with a default service supply rate that is determined based on competitive auctions to acquire the energy to serve the load of customers taking service under the provisions of this Rider. Small and medium commercial and industrial customers are defined in Rate Schedules GS/GM and GMH. For purposes of this rider, medium customers are those customers with a monthly metered demand that is at least 25 kW and less than 200 kW, on average, in a twelve (12) month period. For purposes of assigning customers not being served by an Electric Generation Supplier (“EGS”) to the applicable supply rate, Duquesne Light shall evaluate the customer’s twelve (12) most recent months of monthly billing demand for that customer available in October of the preceding year. If the customer’s average monthly billing demand is less than 25 kW in the twelve (12) months, then that customer shall be assigned to the supply rate for small commercial and industrial customers effective with their January billing. If the customer’s average monthly demand is greater than or equal to 25 kW but less than 200 kW in the twelve (12) month period, then that customer shall be assigned to the supply rate for medium commercial and industrial customers effective with their January billing. (C)

Eligible customers may elect to enroll in the Company’s Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”). The Electric Vehicle Time-of-Use Pilot Program is available to customers that (i) are served under Rate Schedules RS, RH, RA, GS/GM, or GMH; (ii) own or lease a highway-capable plug-in battery electric vehicle or plug-in hybrid electric vehicle, or operate electric vehicle charging facilities at the service location; (iii) are not enrolled in the Company’s Customer Assistance Program, budget billing, or virtual meter aggregation; (iv) have not de-enrolled from the Electric Vehicle Time-of-Use Pilot Program, for any reason, within the last twelve (12) months; and (v) comply with any other applicable Electric Vehicle Time-of-Use Pilot Program rules established at Docket No. P-2020-XXXXXXX or subsequent proceeding. Customers enrolled in the Electric Vehicle Time-of-Use Pilot Program will be moved to the applicable Electric Vehicle Time-of-Use Pilot Program supply rate. (C)

DEFAULT SERVICE SUPPLY RATE

Residential

(Rate Schedules RS, RH and RA)

Application Period	Supply Charge - ¢/kWh	Electric Vehicle Time-of Use Pilot Program ⁽¹⁾		
		Supply Charge - ¢/kWh		
		On-Peak	Shoulder	Off-Peak
June 1, 2021 through November 30, 2021	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2021 through May 31, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2022 through November 30, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2022 through May 31, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2023 through November 30, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2023 through May 31, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2024 through November 30, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2024 through May 31, 2025	X.XXXX	X.XXXX	X.XXXX	X.XXXX

⁽¹⁾ The Electric Vehicle Time-of-Use Pilot Program is year-round, seven (7) days per week, including holidays. On-Peak Hours are 1:00 PM to 9:00 PM. Shoulder Hours are 6:00 AM to 1:00 PM and 9:00 PM to 11:00 PM. Off-Peak Hours are 11:00 PM to 6:00 AM.

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

(C)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY - (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE - (Continued)

Small Commercial and Industrial customers with monthly metered demand less than 25 kW.

(Rate Schedules GS/GM and GMH and Rate Schedule UMS⁽¹⁾)

(C)

Application Period	Supply Charge - ¢/kWh	Rate Schedules GS/GM and GMH Electric Vehicle Time-of Use Pilot Program ⁽²⁾		
		Supply Charge - ¢/kWh		
		On-Peak	Shoulder	Off-Peak
June 1, 2021 through November 30, 2021	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2021 through May 31, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2022 through November 30, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2022 through May 31, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2023 through November 30, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2023 through May 31, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2024 through November 30, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2024 through May 31, 2025	X.XXXX	X.XXXX	X.XXXX	X.XXXX

(C)

⁽¹⁾ Rate Schedule UMS is not eligible for the Electric Vehicle Time-of-Use Pilot Program.

⁽²⁾ The Electric Vehicle Time-of-Use Pilot Program is year-round, seven (7) days per week, including holidays. On-Peak Hours are 1:00 PM to 9:00 PM. Shoulder Hours are 6:00 AM to 1:00 PM and 9:00 PM to 11:00 PM. Off-Peak Hours are 11:00 PM to 6:00 AM.

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE – (Continued)

Medium Commercial and Industrial customers with monthly metered demand
equal to or greater than 25 kW and less than 200 kW.

(Rate Schedules GS/GM and GMH)

<u>Application Period</u>	<u>Supply Charge - ¢/kWh</u>	Electric Vehicle Time-of Use Pilot Program ⁽¹⁾		
		<u>Supply Charge - ¢/kWh</u>		
		On-Peak	Shoulder	Off-Peak
June 1, 2021 through August 31, 2021	X.XXXX	X.XXXX	X.XXXX	X.XXXX
September 1, 2021 through November 30, 2021	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2021 through February 28, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
March 1, 2022 through May 31, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2022 through August 31, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
September 1, 2022 through November 30, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2022 through February 28, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
March 1, 2023 through May 31, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2023 through August 31, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
September 1, 2023 through November 30, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2023 through February 29, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
March 1, 2024 through May 31, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2024 through August 31, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
September 1, 2024 through November 30, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2024 through February 28, 2025	X.XXXX	X.XXXX	X.XXXX	X.XXXX
March 1, 2025 through May 31, 2025	X.XXXX	X.XXXX	X.XXXX	X.XXXX

(C)

⁽¹⁾ The Electric Vehicle Time-of-Use Pilot Program is year-round, seven (7) days per week, including holidays. On-Peak Hours are 1:00 PM to 9:00 PM. Shoulder Hours are 6:00 AM to 1:00 PM and 9:00 PM to 11:00 PM. Off-Peak Hours are 11:00 PM to 6:00 AM.

Lighting

(Rate Schedules AL and SE)

<u>Application Period</u>	<u>Supply Charge - ¢/kWh</u>
June 1, 2021 through November 30, 2021	X.XXXX
December 1, 2021 through May 31, 2022	X.XXXX
June 1, 2022 through November 30, 2022	X.XXXX
December 1, 2022 through May 31, 2023	X.XXXX
June 1, 2023 through November 30, 2023	X.XXXX
December 1, 2023 through May 31, 2024	X.XXXX
June 1, 2024 through November 30, 2024	X.XXXX
December 1, 2024 through May 31, 2025	X.XXXX

(C)

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE – (Continued)

Lighting

(Rate Schedules SM, SH and PAL)

Lamp wattage as available on applicable rate schedule.

Wattage	Nominal kWh Energy Usage per Unit per Month	Application Period					
		06/01/2021 through 11/30/2021	12/01/2021 through 05/31/2022	06/01/2022 through 11/30/2022	12/01/2022 through 05/31/2023	06/01/2023 through 11/30/2023	12/01/2023 through 05/31/2023
Supply Charge ¢ per kWh		X.XXXX	X.XXXX	X.XXXX	X.XXXX	X.XXXX	X.XXXX
Fixture Charge — \$ per Month							
Mercury Vapor							
100	44	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
175	74	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
250	102	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
400	161	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
1000	386	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
High Pressure Sodium							
70	29	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
100	50	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
150	71	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
200	95	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
250	110	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
400	170	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
1000	387	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Flood Lighting - Unmetered							
70	29	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
100	46	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
150	67	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
250	100	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
400	155	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Cobra Head							
45	16	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
60	21	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
95	34	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
139	49	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
219	77	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
275	97	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Colonial							
48	17	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
83	29	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Contemporary							
47	17	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
62	22	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX

(C)

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE – (Continued)

Lighting — (Continued)

(Rate Schedules SM, SH and PAL)

Lamp wattage as available on applicable rate schedule.

Wattage	Nominal kWh Energy Usage per Unit per Month	Application Period			
		06/01/2023 through 11/30/2023	12/01/2023 through 05/31/2024	06/01/2024 through 11/30/2024	12/01/2024 through 05/31/2025
Supply Charge ¢ per kWh		X.XXXX	X.XXXX	X.XXXX	X.XXXX
		Fixture Charge — \$ per Month			
Mercury Vapor					
100	44	X.XX	X.XX	X.XX	X.XX
175	74	X.XX	X.XX	X.XX	X.XX
250	102	X.XX	X.XX	X.XX	X.XX
400	161	X.XX	X.XX	X.XX	X.XX
1000	386	X.XX	X.XX	X.XX	X.XX
High Pressure Sodium					
70	29	X.XX	X.XX	X.XX	X.XX
100	50	X.XX	X.XX	X.XX	X.XX
150	71	X.XX	X.XX	X.XX	X.XX
200	95	X.XX	X.XX	X.XX	X.XX
250	110	X.XX	X.XX	X.XX	X.XX
400	170	X.XX	X.XX	X.XX	X.XX
1000	387	X.XX	X.XX	X.XX	X.XX
Flood Lighting - Unmetered					
70	29	X.XX	X.XX	X.XX	X.XX
100	46	X.XX	X.XX	X.XX	X.XX
150	67	X.XX	X.XX	X.XX	X.XX
250	100	X.XX	X.XX	X.XX	X.XX
400	155	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Cobra Head					
45	16	X.XX	X.XX	X.XX	X.XX
60	21	X.XX	X.XX	X.XX	X.XX
95	34	X.XX	X.XX	X.XX	X.XX
139	49	X.XX	X.XX	X.XX	X.XX
219	77	X.XX	X.XX	X.XX	X.XX
275	97	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Colonial					
48	17	X.XX	X.XX	X.XX	X.XX
83	29	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Contemporary					
47	17	X.XX	X.XX	X.XX	X.XX
62	22	X.XX	X.XX	X.XX	X.XX

(C)

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE – (Continued)

The Company will provide default service supply under this Rider by obtaining the requirements from suppliers through competitive procurements using a competitive auction process. The charges for DSS calculated based on the results of the competitive auction process for service under this Rider will be effective as defined above. (C)
(C)

DSS obtained through the competitive auction process includes energy, capacity, transmission and distribution line losses, congestion and congestion management costs, all or some of the Alternative Energy Credits ("AECs"), ancillary services, PJM grid management charges and other such services or products that are required to provide default service to the Company's customers including Auction Revenue Rights and Financial Transmission Rights ("ARRs/FTRs"). The Company may purchase and provide for a portion of its AEC solar requirements associated with the default service load. The AECs provided by the Company for the applicable procurement group(s) will reduce the obligation of the suppliers in the competitive auction. DSS shall not include transmission service within Duquesne's zone. Duquesne will be responsible for and continue to provide network integration transmission service. The applicable charges for transmission service are defined in Appendix A of this Tariff. (C)
(C)
(C)

Service under this Rider No. 8 – Default Service Supply shall commence in accordance with the switching protocols in Rule No. 45.1.

PROCUREMENT PROCESS

The Company will conduct separate competitive auction solicitations for DSS for each customer procurement group under this Rider. The customer procurement groups for the competitive auction solicitations are defined as residential and lighting, small commercial and industrial and medium commercial and industrial. The small commercial and industrial group includes those customers with monthly metered demand less than 25 kW. The medium commercial and industrial group includes those customers with monthly metered demand equal to or greater than 25 kW and less than 200 kW. The competitive auction process will be bid separately to ensure that there is no cross subsidization. (C)
(C)

The Company will update the rates for the DSS according to the schedule in the above tables. The Company will issue competitive auctions prior to the beginning of each Application Period to update the default service supply rates. The updated rates will be based on the new price(s) available from the winning suppliers through the competitive auction process and the cost for Company solar contracts, if any, for the applicable procurement group(s). The rates will include a reconciliation adjustment as described in the "Calculation of Rate" section of this Rider. In the month prior to the beginning of each Application Period, the Company will file new DSS charges with the Pennsylvania Public Utility Commission ("Commission") for the subsequent Application Period, and, upon Commission approval, these charges shall become effective on the first day of the following month. (C)
(C)

The load of the customer procurement group for the competitive auction will be divided into Tranches. Winning suppliers will provide DSS for the percentage of DSS load corresponding to the number of Tranches won in the competitive auction. Duquesne seeks to procure all Tranches in the competitive auction process pursuant to the competitive auction schedule approved by the Commission. (C)
(C)
(C)

The selection of bids will be submitted to the Commission for its approval or rejection within one business day after submittal. If the bids are not acted on by the Commission within one business day, the Company may proceed on the basis that they are approved and award the bids pursuant to 52 Pa. Code § 54.188(d).

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CONTINGENCY PLAN

In the event Duquesne receives bids for less than all Tranches or the Commission does not approve all or some of the submitted bids or in the event of supplier default, then Duquesne will provide the balance of the default supply for commercial and industrial customers through purchases in the PJM spot markets until such time that a different contingency plan is approved by the Commission. Duquesne will submit to the Commission within fifteen (15) days after any such occurrence an emergency plan to handle any default service shortfall. All costs associated with implementing the contingency plan will be included as part of the DSS described in the section below, "Calculation of Rate."

CALCULATION OF RATE

DSS rates shall be determined based on the formula described in this section. The DSS shall be filed with the Commission no less than sixty (60) days prior to the start of the next Application Period as defined under the Default Service Supply Rate section of this Rider. Rates are reconciled on a semi-annual basis in accordance with the Default Service Supply Rate section of this Rider. The rates shall include an adjustment to reconcile revenue and expense for each Application Period. The DSS shall be determined to the nearest one-thousandth of one (1) mill per kilowatt-hour in accordance with the formula set forth below and shall be applied to all kilowatt-hours billed for default service provided during the billing month:

$$DSS = [(CA + SLR + (DSS_a + E)/S) * F + (DSS_b/S)] * [1/(1 - T)] \tag{C}$$

Where:

- DSS = Default Service Supply rate, converted to cents per kilowatt-hour, to be applied to each kilowatt-hour supplied to customers taking default service from the Company under this Rider.
- CA = The weighted average of the winning bids received in a competitive auction for each customer class identified above and described in the "Default Service Supply Rate" section and adjusted for customer class transmission and distribution line losses. The competitive auction shall be conducted as described in "Procurement Process." (C)
- DSS_a = The total estimated direct and indirect costs incurred by the Company to acquire DSS from any source on behalf of customers described above in the "Procurement Process." The Application Period shall be for each period over which the DSS, as computed, will apply. Projections of the Company's costs to acquire default supply for the Application Period shall include all direct and indirect costs of generation supply to be acquired by the Company from any source plus any associated default service supply-related procurement and administration costs. Default service supply-related costs shall include the cost of preparing the company's default service plan filing and working capital costs associated with default service supply. The Company will recover these costs over the default service plan period as defined in the Commission's order at Docket No. R-2018-3000124. (C)
(C)
(C)

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

- DSS_b = Company costs may also include the expenses to support time-of-use (“TOU”) programs offered by the Company. Time-of-use expenses will be assigned to the applicable customer class for recovery through this Rider. (C)

- SLR = The costs associated with any Commission-approved solar contracts and its administration will be recovered from the customers in the applicable procurement group(s) that have received an allocation of the AECs associated with the solar contracts. The proceeds of any solar energy, capacity, ancillary services and solar AECs that are acquired and in excess of those allocated to default service suppliers, and sold into the market, will be netted against solar contract costs.

- E = Experienced net over or under collection for each customer procurement group based on the revenue and expense for the six (6) month period ending one-hundred twenty (120) days prior to the end of Application Period. The DSS rate effective June 1 shall include reconciliation of revenue and expense for the six (6) month period October through March. The DSS rate effective December 1 shall include reconciliation of revenue and expense for the six (6) month period April through July. Interest shall be computed monthly at the rate provided for in Title 52 Pa. Code §54.190(c), from the month the over collection or under collection occurs to the effective month that the over collection is refunded or the under collection is recouped.

- S = The Company’s default service retail kWh sales to customers in the applicable Customer Class, projected for the Application Period.

- F = Rate Factor only for the residential and lighting customer groups. The Rate Factor shall be 1.0 for all other customer groups. DSS for residential and lighting customer groups will be obtained in the same competitive auction. The Rate Factor adjustment reflects the load shape of the residential and lighting classes. The Rate Factor will be as follows for each Application Period. (C)

Application Period	Residential	Lighting
June 1, 2021 through May 31, 2022	X.XXXX	X.XXXX
June 1, 2022 through May 31, 2023	X.XXXX	X.XXXX
June 1, 2023 through May 31, 2024	X.XXXX	X.XXXX
June 1, 2024 through May 31, 2025	X.XXXX	X.XXXX

(C)
(C)
(C)
(C)

- T = The Pennsylvania gross receipts tax rate in effect during the billing month, expressed in decimal form.

The rate shall become effective for default supply service rendered on and after the beginning of the Application Period unless otherwise ordered by the Commission, and shall remain in effect for the effective periods defined above, unless revised on an interim basis subject to the approval of the Commission. Pursuant to 52 Pa. Code §69.1809(c), upon determination that the DSS, if left unchanged, would result in a material over or undercollection of supply-related costs incurred or expected to be incurred during the effective period, the Company may file with the Commission for an interim revision of the DSS to become effective thirty (30) days from the date of filing, unless otherwise ordered by the Commission.

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued) (C)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

CALCULATION OF RATE – ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM (C)

DSS Electric Vehicle Time-of-Use Pilot Program (“DSS EV-TOU”) rates shall be supplied via the same fixed price, full requirements (“FPFR”) products that provide default service supply for the applicable customer class. The DSS EV-TOU rates will be distinguished by three time periods throughout the year. The Off-Peak Period will consist of all hours every day from 11:00 PM through 6:00 AM. The On-Peak Period will consist of all hours every day from 1:00 PM through 9:00 PM. All other hours will be included in the Shoulder Period. The same On-Peak, Off-Peak, and Shoulder Periods will be applicable to all eligible DSS EV-TOU service customers. (C)

The DSS EV-TOU rates shall be filed with the Commission no less than sixty (60) days prior to the start of the next Application Period as defined under the Default Service Supply Rate section of this Rider. Rates are reconciled on a semi-annual basis in accordance with the Default Service Supply Rate section of this Rider. The rates shall include an adjustment to reconcile revenue and expense for each Application Period. The DSS EV-TOU shall be determined to the nearest one-thousandth of one (1) mill per kilowatt-hour and shall be applied to all kilowatt-hours billed for DSS EV-TOU rates provided during the billing month. (C)

During the pilot program, the DSS EV-TOU rates will apply to all load associated with the applicable meter. (C)

$$DSS = [(CA + SLR + (DSS_a + E)/S) * F * \underline{TOU F} + (DSS_b/S)] * [1/(1 - T)]$$
 (C)

Where: (C)

DSS = Default Service Supply rate as defined above, with the addition of the EV-TOU Rate Factors. (C)

TOU F = EV-TOU Rate Factors (as defined below) will be utilized to derive the On-Peak, Shoulder, and Off-Peak rates for the customer class based on its respective energy consumption patterns and capacity requirements, as approved in the Company’s most recent DSP proceeding at Docket No. P-2020-XXXXXXX. (C)

Electric Vehicle Time-of-Use Rate Factors (C)									
Application Period	Residential RS, RH, RA			Small C&I ⁽¹⁾ GS, GM<25, GMH<25			Medium C&I GM & GMH ≥ 25kW < 200 kW		
	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾
June 1, 2021 through May 31, 2022	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2022 through May 31, 2023	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2023 through May 31, 2024	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2024 through May 31, 2025	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX

⁽¹⁾Rate Schedule UMS is not eligible for the Electric Vehicle Time-of-Use Pilot Program.

⁽²⁾Denotes On-Peak

⁽³⁾Denotes Shoulder

⁽⁴⁾Denotes Off-Peak

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

ANNUAL RECONCILIATION

The Company will file with the Commission an annual reconciliation statement of the revenues, expenses and resulting over and under recovery for the twelve (12) months beginning February 1 and ending January 31 of the following year, in accordance with 66 Pa. C.S. § 1307(e), by March 1 for each service class. An annual reconciliation statement shall be prepared separately for the Residential, Small Commercial & Industrial and Medium Commercial & Industrial customer classes.

The standard DSS rate and DSS EV-TOU over/under collections will be calculated in total for each procurement class. (C)

MISCELLANEOUS

Minimum bills shall not be reduced by reason of the DSS. DSS charges shall not be a part of the monthly rate schedule minimum nor be subject to any credits or discounts.

Application of the DSS shall be subject to continuous review and audit by the Commission at intervals it shall determine.

(C)

(C)

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 9 – DAY-AHEAD HOURLY PRICE SERVICE

(Applicable to Rates GS/GM, GMH, GL, GLH, L and HVPS and Generating Station Service)

Day-ahead hourly price service provides medium (≥ 200 kW) and large commercial and industrial customers with the ability to purchase their electric supply requirements on a day-ahead hourly basis. Duquesne Light shall evaluate the customer's twelve (12) most recent months of monthly billing demand for that customer available in October of the preceding year. If the customer's average monthly billing demand is greater than or equal to 200 kW, the customer will be assigned to Rider No. 9 effective with their June billing. The Company will supply electricity under this rider by obtaining the requirements based on a competitive auction. This rider is also available for the supply of electricity to generating stations that are not otherwise self-supplying and where the generating station is not otherwise receiving service from an EGS. Metering equipment must be installed at the generating station at the expense of the customer.

(C)

MONTHLY CHARGES

Energy charges are hourly and provided at the day-ahead PJM locational marginal prices ("LMP") based on the customer's real time metered hourly load, plus energy-related ancillary services including PJM administrative charges, adjusted for losses, plus a fixed retail administrative charge. PJM posts the day-ahead locational marginal price on their web site at 4:00 PM EPT. Capacity charges are equal to the full PJM Reliability Pricing Model ("RPM") capacity price for the Duquesne Zone, and shall recover the charges associated with the customer's share of the Company's capacity obligation assigned by PJM, plus the charges for capacity based ancillary services. Energy and capacity charges will be calculated using the following formula and adjusted for the Pennsylvania Gross Receipts Tax (GRT) in effect.

End Hour

$$\sum L_{RTt} * (1 + ADJ_t) * (LMP_{Dat} + OR_{Dat}) +$$

t=Start Hour

End Hour

$$\sum [(L_{RTt} * (1 + ADJ_t)) * (SR_{RTt} + REG_{RTt} + SCN_{RTt} + S1A) + L_{RTt} * (PJM_S + FRA)] +$$

t=Start Hour

End Day

$$\sum [(CO_D * CChg_D) + NPLC_D * (R_D + B_D)]$$

D=Start Day

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 9 – DAY-AHEAD HOURLY PRICE SERVICE – (Continued)

(Applicable to Rates GS/GM, GMH, GL, GLH, L and HVPS and Generating Station Service)

MONTHLY CHARGES – (Continued)

PJM Ancillary Service Charges and Other PJM Charges – (Continued)

- PJM_S** = PJM Surcharge is a pass-through of the charges incurred by the Company for grid management and administrative costs associated with membership and operation in PJM. These are the charges incurred by the Company under PJM Schedules 9 and 10 to provide hourly price service.
- R_D** = Reactive supply service charge in \$/MW-day to serve the customer's load as calculated under the PJM Tariff Schedule 2.
- B_D** = Blackstart service charge in \$/MW-day to serve the customer's load as calculated under the PJM Tariff Schedule 6A.

Fixed Retail Administrative Charge

FRA = The Fixed Retail Administrative Charge in \$ per MWH. The Fixed Retail Administrative Charge consists of the sum of administrative charges for the suppliers providing hourly price service (as determined by a competitive solicitation process) and for the Company to obtain supply and administer this service. Default service supply-related costs shall include the cost of preparing the company's default service plan filing and working capital costs associated with default service supply. The Company will recover these costs over the default service plan period as defined in the Commission's order at Docket No.R-2018-3000124.

The supplier charges shall be based on the winning bids in the Company's most recent solicitation for supply of hourly price default service.

The Company's administrative charges shall be based on an amortization of the costs incurred by the Company to acquire generation supply from any source for the Medium (≥ 200 kW) Customer Class and Large C&I Customer Class during the most recent twelve-month (12-month) period ended May 31st (as determined by amortizing such costs over a 12-month period) plus the amortization of the cost of administering the hourly price service over the duration of the default service plan, including any unbundled costs of preparing the Company's default service plan filing and working capital costs associated with default service supply.

This charge shall also include the Company's costs associated with any Commission approved solar contracts and its administration, if applicable, in \$ per MWh. The proceeds of any solar energy, capacity, ancillary services and solar AECs that are acquired and in excess of those allocated to default service suppliers, and sold into the market, will be netted against solar contract costs.

Application Period	FRA \$/MWH
June 1, 2021 through May 31, 2022	\$X.XX
June 1, 2022 through May 31, 2023	\$X.XX
June 1, 2023 through May 31, 2024	\$X.XX
June 1, 2024 through May 31, 2025	\$X.XX

(C)

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 9 – DAY-AHEAD HOURLY PRICE SERVICE – (Continued)

(Applicable to Rates GS/GM, GMH, GL, GLH, L and HVPS and Generating Station Service)

MONTHLY CHARGES – (Continued)

Customer's Capacity Obligation and Network Service Peak Load

CO_D = Capacity Obligation in MW for each day associated with supporting the customer's load as described in the section "Determination of Capacity Obligation.

NPLC_D = The customer's daily network service coincident peak load contribution in MW. This quantity is determined based on the customer's load coincident with the annual peak of the Duquesne Zone (single coincident peak) as defined in the PJM Tariff Section 34.1.

Capacity Charges

CChg_D= The demand charge in \$/MW-day, which is equal to the full PJM RPM Final Zonal Capacity Price for the Duquesne Zone.

PJM bills these charges to the Company as a function of the load measured in megawatts (MW) and expresses these charges as \$/MW, \$/MWH and \$/MW-day. The Company measures the customer's load and energy usage in kilowatts (kW) and will convert the above charges to \$/kW, \$/kWh and \$/kW-day for the purposes of computing the customer's monthly bill.

PROCUREMENT PROCESS

The Company will conduct a competitive auction to obtain day-ahead hourly price service under this rider. The winning bidder(s) will be responsible for providing default service supply at PJM day-ahead energy prices, capacity, ancillary services, and other PJM management charges as defined above. The winning supplier(s) will be the supplier(s) who bids the lowest price(s) in this solicitation in \$/MWH to cover the costs of renewable energy supply, energy balancing, and supplier administrative costs.

(C)

CONTINGENCY PLAN

In the event Duquesne does not receive bids, the Commission does not approve the submitted bid(s) or a supplier defaults, Duquesne will provide default supply for commercial and industrial customers through purchases in accordance with the above formula and process. The Company will pass-through the costs it incurs to provide the renewable energy requirements, energy balancing and any administrative costs in addition to those costs otherwise recovered through the Fixed Retail Administrative Charge described in the "Monthly Charges" section of this rider. All revenue and expense associated with the contingency plan will be reconciled as described in the "Annual Reconciliation" section of this rider.

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 21 – NET METERING SERVICE – (Continued)

(Applicable to Rates RS, RH, RA, GS/GM, GMH and GL)

BILLING PROVISIONS - (Continued)

- 2. If the Company supplies more kilowatt-hours of electricity than the customer-generator facility feeds back to the Company's system during the billing period, all charges of the appropriate rate schedule shall be applied to the net kilowatt-hours of electricity that the Company supplied. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.
- 3. For customer-generators involved in virtual meter aggregation programs, a credit shall be applied first to the meter through which the generating facility supplies electricity to the distribution system, then through the remaining meters for the customer-generator's account equally at each meter's designated rate. Virtual meter aggregation is the combination of readings and billing for all meters regardless of rate class on properties owned or leased and operated by a customer-generator by means of the Company's billing process, rather than through physical rewiring of the customer-generator's property for a physical, single point of contact. The customer-generators are responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.

BILLING PROVISIONS FOR ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM ("EV-TOU") CUSTOMER GENERATORS

(C)

(Applicable to Rates RS, RH, RA, GS/GM and GMH)

(C)

The following billing provisions apply to customer-generators that take service on Rider No 8 – Default Service Supply and are on EV-TOU rates.

(C)

- 1. The EV-TOU customer-generator will receive a credit for each kilowatt-hour received by the Company up to the total amount of electricity delivered to the Customer during the billing period at the full retail rate consistent with Commission regulations. If an EV-TOU customer-generator supplies more electricity to the Company than the Company delivers to the customer-generator in a given billing period, the Company will maintain an active record of the excess kilowatt hours produced at the customer-generators premise in a "bank". If an EV-TOU customer-generator supplies more electricity to the Company than the Company delivers to the customer-generator in a given billing period, the excess kilowatt hours shall be carried forward and credited against the EV-TOU customer generator's usage in a subsequent billing period at the full retail rate. If, in a subsequent billing period, a customer consumes more electricity than produced, kilowatt-hours will be pulled from the customer's bank on a first in first out basis. Any excess kilowatt hours shall continue to accumulate and credit against usage for the 12 month period ending May 31st. On an annual basis, the Company will compensate the customer-generator for kilowatt-hours remaining in the bank on May 31st, at the applicable Price To Compare at the time the excess kilowatt-hours were banked. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.

(C)

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 21 – NET METERING SERVICE – (Continued)

(Applicable to Rates RS, RH, RA, GS/GM, GMH and GL)

BILLING PROVISIONS FOR
ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM (“EV-TOU”) CUSTOMER GENERATORS

(Applicable to Rates RS, RH, RA, GS/GM and GMH)

- (Continued)

- 2. If the Company supplies more kilowatt-hours of electricity than the customer-generator supplies during the billing period, all charges of the appropriate rate schedule shall be applied to the net kilowatt-hours of electricity that the Company supplied. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule. (C)
- 3. If an eligible customer-generator wishes to no longer be enrolled in the EV-TOU Pilot Program and switches to the standard default service supply product, any excess kilowatt hours banked and remaining from the EV-TOU period will be used, as applicable, for the remaining portion of the 12 month period ending May 31 and the Company shall compensate for any excess kilowatt hours that are banked at the Price To Compare in effect at the time. (C)

NET METERING PROVISIONS FOR SHOPPING CUSTOMERS

(C)

- 1. Customer-generators may take net metering services from EGSs that offer such services.
- 2. If a net-metering customer takes service from an EGS, the Company will credit the customer for distribution charges for each kilowatt hour produced by the customer-generator, up to the total amount of kilowatt-hours delivered to the customer by the Company during the billing period. If a customer-generator supplies more electricity to the electric distribution system than the Company delivers to the customer-generator in a given billing period, the excess kilowatt hours shall be carried forward and credited against the customer-generator’s usage in subsequent billing periods at the Company’s distribution rates. Any excess kilowatt hours shall continue to accumulate for the 12 month period ending May 31. Any excess kilowatt hours at the end of the 12 month period will not carry over to the next year for distribution charge purposes. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.
- 3. If the Company delivers more kilowatt-hours of electricity than the customer-generator facility feeds back to the Company’s system during the billing period, all charges of the applicable rate schedule shall be applied to the net kilowatt-hours of electricity that the Company delivered. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

(C)

RIDER NO. 21 – NET METERING SERVICE – (Continued)

(Applicable to Rates RS, RH, RA, GS/GM, GMH and GL)

NET METERING PROVISIONS FOR SHOPPING CUSTOMERS – (Continued)

4. Pursuant to Commission regulations, the credit or compensation terms for excess electricity produced by customer-generators who are customers of EGSs shall be stated in the service agreement between the customer-generator and the EGS. The Company will provide the customer-generator with a statement of monthly kilowatt hour usage for the 12 month period ending May 31 for the purpose of the customer-generator seeking credit or compensation from the EGS.
5. If a customer-generator switches electricity suppliers, the Company shall treat the end of the service period as if it were the end of the year.

APPLICATION

Customer-generators seeking to receive service under the provisions of this Rider must submit a written application to the Company demonstrating compliance with the Net Metering Rider provisions and quantifying the total rated generating capacity of the customer-generator facility.

MINIMUM CHARGE

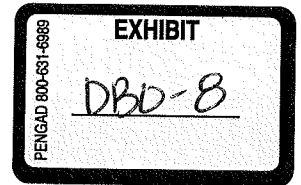
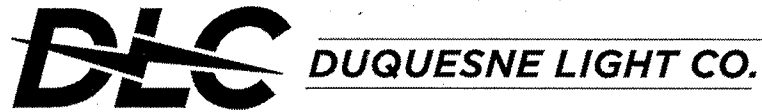
The Minimum Charges under Rate Schedule RS, RH, RA, GS/GM, GMH and GL apply for installations under this Rider.

RIDERS

Bills rendered by the Company under this Rider shall be subject to charges stated in any other applicable Rider.

EXHIBIT NO. DBO-8

SUPPLEMENT NO. X
TO ELECTRIC – PA. P.U.C. NO. 25



SCHEDULE OF RATES

For Electric Service in Allegheny and Beaver Counties

(For List of Communities Served, see Pages No. 4 and 5)

Issued By

DUQUESNE LIGHT COMPANY

411 Seventh Avenue
Pittsburgh, PA 15219

Steven E. Malnight

President and Chief Executive Officer

ISSUED: Xxxxxxxx XX, XXXX

EFFECTIVE: Xxxx XX, XXXX

Issued in compliance with
Commission Order dated Xxxxxxxx XX, XXXX at Docket No. P-2020-XXXXXXX.

NOTICE

THIS TARIFF SUPPLEMENT UPDATES THE TABLE OF CONTENTS, ADDS PAGES AND
MODIFIES AN EXISTING RULE AND EXISTING RIDERS

See Page Two

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

List of Modifications Made By This Tariff Page No. 2A through Page No. 2E

Page No. 2A through Page No. 2E have been added to Tariff No. 25 to accommodate the List of Modifications.

Page No. 98A has been added to Rider No. 8 – Default Service Supply and therefore to Tariff No. 25

Page No. 104A has been added to Rider No. 8 – Default Service Supply and therefore to Tariff No. 25.

Page No. 136A has been added to Rider No 21 – Net Metering Service and therefore to Tariff No. 25.

Table of Contents Second Revised Page No. 3
Cancelling First Revised Page No. 3

Page No. 136A has been added to Rider No. 21 – Net Metering Service and to the Table of Contents in Tariff No. 25.

Rule No. 18.1 Electric Vehicle Charging First Revised Page No. 26
Cancelling Original Page No. 26

Language has been added to provide clarity for purposes of defining electric vehicles as described in Rule No. 18.1.

Rider No. 8 – Default Service Supply First Revised Page No. 98
Cancelling Original Page No. 98

Language has been updated to remove “a request for proposal” and replace it with “competitive auctions” to reflect current business practice.

Rider No. 8 – Default Service Supply First Revised Page No. 98
Cancelling Original Page No. 98

Eligibility language has been added regarding the Company’s proposed Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”).

Rider No. 8 – Default Service Supply First Revised Page No. 98
Cancelling Original Page No. 98

The Residential (Rate Schedules RS, RH and RA) Table has been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 8 – Default Service Supply

First Revised Page No. 98
Cancelling Original Page No. 98

The Residential (Rate Schedules RS, RH and RA) Table has been modified to include an “Electric Vehicle Time-of-Use Pilot Program” section.

A footnote has been added to describe the proposed Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”).

Rider No. 8 – Default Service Supply

First Revised Page No. 98
Cancelling Original Page No. 98

The Small C&I with monthly metered demand less than 25 kW (Rate Schedules GS/GM, GMH and UMS) Table has been moved from Original Page No. 98 to Original Page No. 98A to accommodate the addition of the eligibility language regarding the Company’s proposed Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”).

Rider No. 8 – Default Service Supply

Original Page No. 98A

The Small C&I with monthly metered demand less than 25 kW (Rate Schedules GS/GM, GMH and UMS) Table has been moved to Original Page No. 98A from Original Page No. 98 to accommodate the addition of the eligibility language regarding the Company’s proposed Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”).

Rider No. 8 – Default Service Supply

Original Page No. 98A

The Small C&I with monthly metered demand less than 25 kW (Rate Schedules GS/GM, GMH and UMS) Table has been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

Rider No. 8 – Default Service Supply

Original Page No. 98A

The Small C&I with monthly metered demand less than 25 kW (Rate Schedules GS/GM, GMH and UMS) Table has been modified to include an “Electric Vehicle Time-of-Use Pilot Program” section applicable to Rate Schedules GS/GM and GMH.

Footnotes have been added to describe the proposed Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”).

Rider No. 8 – Default Service Supply

Second Revised Page No. 99
Cancelling First Revised Page No. 99

The Medium C&I with monthly metered demand equal to or greater than 25 kW (Rates Schedules GS/GM and GMH) and Lighting (Rate Schedules AL and SE) Tables have been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 8 – Default Service Supply Second Revised Page No. 99
Cancelling First Revised Page No. 99

The Medium C&I with monthly metered demand equal to or greater than 25 kW (Rates Schedules GS/GM and GMH) Table has been modified to include an “Electric Vehicle Time-of-Use Pilot Program” section.

A footnote has been added to describe the proposed Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”).

Rider No. 8 – Default Service Supply First Revised Page No. 100
Cancelling Original Page No. 100

Rider No. 8 – Default Service Supply First Revised Page No. 101
Cancelling Original Page No. 101

The Lighting (Rate Schedules SM, SH and PAL) Tables have been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

Rider No. 8 – Default Service Supply First Revised Page No. 102
Cancelling Original Page No. 102

Language has been updated to remove “Request for Proposal” and “RFP” and replace it with “competitive auction” to reflect current business practice.

Rider No. 8 – Default Service Supply First Revised Page No. 102
Cancelling Original Page No. 102

Language has been updated to remove “up to 27 MW” and replace it with “for a portion” to reflect the proposed default service plan.

Rider No. 8 – Default Service Supply First Revised Page No. 103
Cancelling Original Page No. 103

Symbols in the formula and the correlating formula detail have been modified to reflect current business practice. “CA” (Competitive Auction) has replaced “RFP” (Request for Proposal).

Rider No. 8 – Default Service Supply First Revised Page No. 103
Cancelling Original Page No. 103

DSS_b/S has been added to the formula to denote the breakout of these costs which were previously recovered in DSS_a.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 8 – Default Service Supply First Revised Page No. 103
Cancelling Original Page No. 103

Language previously in the formula detail for DSS_a has been moved to its own symbol, DSS_b, and now resides on First Revised Page No. 104.

Rider No. 8 – Default Service Supply First Revised Page No. 104
Cancelling Original Page No. 104

Language previously in the formula detail for DSS_a on Original Page No. 103 has been moved to its own symbol, DSS_b, and now resides on First Revised Page No. 104.

Rider No. 8 – Default Service Supply First Revised Page No. 104
Cancelling Original Page No. 104

In the formula detail for “F,” language has been updated to remove “RFP” and replace it with “competitive auction” to reflect current business practice.

Rider No. 8 – Default Service Supply First Revised Page No. 104
Cancelling Original Page No. 104

The Rate Factor Application Period and Adjustment Table has been modified to reflect the proposed default service period.

Rider No. 8 – Default Service Supply Original Page No. 104A

Original Page No. 104A has been added to Rider No. 8 – Default Service Supply to accommodate the Calculation of Rate – Electric Vehicle Time-of-Use Pilot Program section as well as the formula for the calculation, the formula detail and the Rate Factors Table.

Rider No. 8 – Default Service Supply First Revised Page No. 105
Cancelling Original Page No. 105

Language has been added under the “Annual Reconciliation” section denoting how over/under collections will be calculated in regard to the proposed EV-TOU Pilot Program.

Rider No. 8 – Default Service Supply First Revised Page No. 105
Cancelling Original Page No. 105

Language has been removed under the “Miscellaneous” section pertaining to a TOU pilot program that has concluded.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 9 – Day-Ahead Hourly Price Service First Revised Page No. 106
Cancelling Original Page No. 106

Language has been updated to remove “request for proposal” and “RFP” and replace it with “competitive auction” to reflect current business practice.

Rider No. 9 – Day-Ahead Hourly Price Service First Revised Page No. 108
Cancelling Original Page No. 108

A “Fixed Retail Administrative Charge” (“FRA”) Table has been modified to update the application periods (June 1, 2021, through May 31, 2025) under the proposed four-year default service plan.

Rider No. 9 – Day-Ahead Hourly Price Service First Revised Page No. 109
Cancelling Original Page No. 109

Language in the Procurement Process section has been updated to remove “request for proposal (“RFP”)” and replace it with “auction” to reflect current business practice.

Rider No. 21 – Net Metering Service First Revised Page No. 135
Cancelling Original Page No. 135

First Revised Page No. 136
Cancelling Original Page No. 136

Language has been added to Rider No. 21 – Net Metering Service to provide the Billing Provisions for Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”) Customer Generators.

Rider No. 21 – Net Metering Service First Revised Page No. 135
Cancelling Original Page No. 135

First Revised Page No. 136
Cancelling Original Page No. 136

Language in Rider No. 21 – Net Metering Service providing the Net Metering Provisions for Shopping Customers that was previously on Original Page No. 135 has been moved to the middle of First Revised Page No. 136 to accommodate the addition of language for Billing Provisions for Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”) Customer Generators.

Rider No. 21 – Net Metering Service Original Page No. 136A

Original Page No. 136A has been added to Rider No. 21 – Net Metering Service to provide for the addition and movement of language.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rider No. 21 – Net Metering Service

Original Page No. 136A

The Net Metering Provisions for Shopping Customers, Application, Minimum Charge and Riders sections of Rider No. 21 – Net Metering Service that were previously on Original Page No. 136 have been moved to Original Page No. 136A.

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(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

RULES AND REGULATIONS - (Continued)

MEASUREMENT AND USE OF SERVICE - (Continued)

17. FLUCTUATIONS AND UNBALANCES The customer's use of electric service shall not cause fluctuating loads or unbalanced loads of sufficient magnitude to impair the service to other customers or to interfere with the proper operation of the Company's facilities. The Company may require the customer to make such changes in his equipment or use thereof, or to install such corrective equipment, as may be necessary to eliminate fluctuating or unbalanced loads; or, where the disturbances caused thereby may be eliminated more economically by changes in or additions to the Company's facilities, the Company will, at the request of the customer, provide the necessary corrective facilities at a reasonable charge. Payment will be made in full in advance for supplying special equipment installed under this Rule.

18. REDISTRIBUTION All electric energy shall be consumed by the customer to whom the Company supplies and delivers such energy, except that (1) the customer owning and operating a separate office building, and (2) any other customer who, upon showing that special circumstances exist, obtains the written consent of the Company may redistribute electric energy to tenants of such customer, but only if such tenants are not required to make a specific payment for such energy.

This Rule shall not affect any practice undertaken prior to June 1, 1965. See Rule No. 41 for special requirements for residential dwelling units in a building.

18.1 ELECTRIC VEHICLE CHARGING Electricity sales by a person, corporation or other entity, not a public utility, owning and operating an electric vehicle charging facility for the sole purpose of recharging an electric vehicle battery for compensation are not construed to be sales to residential consumers and therefore do not fall under the pricing requirements of 66 Pa.C.S. § 1313. Further, for purposes of third party-owned electric vehicle charging stations, charging the electric vehicle shall not be considered redistribution as defined in Rule No. 18 - Redistribution. For the purposes of this Rule No. 18.1, electric vehicles are defined as any vehicle licensed to operate on public roadways that are propelled in whole or in part by electrical energy stored on-board for the purpose of propulsion. Types of electric vehicles include, but are not limited to, plug-in hybrid electric vehicles and battery electric vehicles. Electric vehicle charging stations shall be made in accordance with the Company's "Electric Service Installation Rules," a copy of which may be found at www.duquesnelight.com. The station must be designed to protect for back flow of electricity to the Company's electrical distribution circuit as required by Company rules. The Company shall not be liable for any damages associated with operation of the charging station. For stations dedicated solely for the purpose of charging electric vehicles wherein a third party owns the charger and allows an electric vehicle owner to use their facility to charge an electric vehicle, the owner of the charging facility shall notify the Company at least one hundred twenty (120) days in advance of the planned installation date and may be required to install metering for the station as determined by the Company. The third party owner of the station shall be responsible for all applicable Tariff rates, fees and charges. For such installations, the electric vehicle owner shall be responsible for all fees imposed by the owner of the station for charging the electric vehicle.

(C)

19. CONTINUITY AND SAFETY The Company will use all reasonable care to provide safe and continuous delivery of electricity but shall not be liable for any damages arising through interruption of the delivery of electricity or for injury to persons or property resulting from the use of the electricity delivered.

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

Default Service Supply (“DSS”) provides residential, commercial, industrial and lighting customers on the applicable rate schedules with a default service supply rate that is determined based on a ~~request-for-proposal-competitive auctions~~ to acquire the energy to serve the load of customers taking service under the provisions of this Rider. Small and medium commercial and industrial customers are defined in Rate Schedules GS/GM and GMH. For purposes of this rider, medium customers are those customers with a monthly metered demand that is at least 25 kW and less than 200 kW, on average, in a twelve (12) month period. For purposes of assigning customers not being served by an Electric Generation Supplier (“EGS”) to the applicable supply rate, Duquesne Light shall evaluate the customer’s twelve (12) most recent months of monthly billing demand for that customer available in October of the preceding year. If the customer’s average monthly billing demand is less than 25 kW in the twelve (12) months, then that customer shall be assigned to the supply rate for small commercial and industrial customers effective with their January billing. If the customer’s average monthly demand is greater than or equal to 25 kW but less than 200 kW in the twelve (12) month period, then that customer shall be assigned to the supply rate for medium commercial and industrial customers effective with their January billing. (C)

Eligible customers may elect to enroll in the Company’s Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”). The Electric Vehicle Time-of-Use Pilot Program is available to customers that (i) are served under Rate Schedules RS, RH, RA, GS/GM, or GMH; (ii) own or lease a highway-capable plug-in battery electric vehicle or plug-in hybrid electric vehicle, or operate electric vehicle charging facilities at the service location; (iii) are not enrolled in the Company’s Customer Assistance Program, budget billing, or virtual meter aggregation; (iv) have not de-enrolled from the Electric Vehicle Time-of-Use Pilot Program, for any reason, within the last twelve (12) months; and (v) comply with any other applicable Electric Vehicle Time-of-Use Pilot Program rules established at Docket No. P-2020-XXXXXX or subsequent proceeding. Customers enrolled in the Electric Vehicle Time-of-Use Pilot Program will be moved to the applicable Electric Vehicle Time-of-Use Pilot Program supply rate. (C)

DEFAULT SERVICE SUPPLY RATE

Residential

(Rate Schedules RS, RH and RA)

Application Period	Supply Charge - ¢/kWh	Electric Vehicle Time-of Use Pilot Program ⁽¹⁾		
		Supply Charge - ¢/kWh		
		On-Peak	Shoulder	Off-Peak
June 1, 2021 through November 30, 2021	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2021 through May 31, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2022 through November 30, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2022 through May 31, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2023 through November 30, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2023 through May 31, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2024 through November 30, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2024 through May 31, 2025	X.XXXX	X.XXXX	X.XXXX	X.XXXX

⁽¹⁾ The Electric Vehicle Time-of-Use Pilot Program is year-round, seven (7) days per week, including holidays. On-Peak Hours are 1:00 PM to 9:00 PM. Shoulder Hours are 6:00 AM to 1:00 PM and 9:00 PM to 11:00 PM. Off-Peak Hours are 11:00 PM to 6:00 AM.

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

(C)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY - (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE - (Continued)

Small Commercial and Industrial customers with monthly metered demand less than 25 kW.

(Rate Schedules GS/GM and GMH and Rate Schedule UMS⁽¹⁾)

(C)

Application Period	Supply Charge - ¢/kWh	Rate Schedules GS/GM and GMH Electric Vehicle Time-of Use Pilot Program ⁽²⁾		
		Supply Charge - ¢/kWh		
		On-Peak	Shoulder	Off-Peak
June 1, 2021 through November 30, 2021	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2021 through May 31, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2022 through November 30, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2022 through May 31, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2023 through November 30, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2023 through May 31, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2024 through November 30, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2024 through May 31, 2025	X.XXXX	X.XXXX	X.XXXX	X.XXXX

(C)

⁽¹⁾ Rate Schedule UMS is not eligible for the Electric Vehicle Time-of-Use Pilot Program.

⁽²⁾ The Electric Vehicle Time-of-Use Pilot Program is year-round, seven (7) days per week, including holidays. On-Peak Hours are 1:00 PM to 9:00 PM. Shoulder Hours are 6:00 AM to 1:00 PM and 9:00 PM to 11:00 PM. Off-Peak Hours are 11:00 PM to 6:00 AM.

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE – (Continued)

Medium Commercial and Industrial customers with monthly metered demand equal to or greater than 25 kW and less than 200 kW.

(Rate Schedules GS/GM and GMH)

Application Period	Supply Charge - ¢/kWh	Electric Vehicle Time-of Use Pilot Program ⁽¹⁾		
		Supply Charge - ¢/kWh		
		On-Peak	Shoulder	Off-Peak
June 1, 2021 through August 31, 2021	X.XXXX	X.XXXX	X.XXXX	X.XXXX
September 1, 2021 through November 30, 2021	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2021 through February 28, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
March 1, 2022 through May 31, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2022 through August 31, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
September 1, 2022 through November 30, 2022	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2022 through February 28, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
March 1, 2023 through May 31, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2023 through August 31, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
September 1, 2023 through November 30, 2023	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2023 through February 29, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
March 1, 2024 through May 31, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
June 1, 2024 through August 31, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
September 1, 2024 through November 30, 2024	X.XXXX	X.XXXX	X.XXXX	X.XXXX
December 1, 2024 through February 28, 2025	X.XXXX	X.XXXX	X.XXXX	X.XXXX
March 1, 2025 through May 31, 2025	X.XXXX	X.XXXX	X.XXXX	X.XXXX

(C)

⁽¹⁾—The Electric Vehicle Time-of-Use Pilot Program is year-round, seven (7) days per week, including holidays. On-Peak Hours are 1:00 PM to 9:00 PM. Shoulder Hours are 6:00 AM to 1:00 PM and 9:00 PM to 11:00 PM. Off-Peak Hours are 11:00 PM to 6:00 AM.

Lighting

(Rate Schedules AL and SE)

Application Period	Supply Charge - ¢/kWh
June 1, 2021 through November 30, 2021	X.XXXX
December 1, 2021 through May 31, 2022	X.XXXX
June 1, 2022 through November 30, 2022	X.XXXX
December 1, 2022 through May 31, 2023	X.XXXX
June 1, 2023 through November 30, 2023	X.XXXX
December 1, 2023 through May 31, 2024	X.XXXX
June 1, 2024 through November 30, 2024	X.XXXX
December 1, 2024 through May 31, 2025	X.XXXX

(C)

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE – (Continued)

Lighting

(Rate Schedules SM, SH and PAL)

Lamp wattage as available on applicable rate schedule.

Wattage	Nominal kWh Energy Usage per Unit per Month	Application Period					
		06/01/2021 through 11/30/2021	12/01/2021 through 05/31/2022	06/01/2022 through 11/30/2022	12/01/2022 through 05/31/2023	06/01/2023 through 11/30/2023	12/01/2023 through 05/31/2023
Supply Charge ¢ per kWh		X.XXXX	X.XXXX	X.XXXX	X.XXXX	X.XXXX	X.XXXX
Fixture Charge — \$ per Month							
Mercury Vapor							
100	44	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
175	74	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
250	102	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
400	161	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
1000	386	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
High Pressure Sodium							
70	29	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
100	50	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
150	71	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
200	95	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
250	110	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
400	170	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
1000	387	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Flood Lighting - Unmetered							
70	29	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
100	46	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
150	67	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
250	100	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
400	155	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Cobra Head							
45	16	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
60	21	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
95	34	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
139	49	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
219	77	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
275	97	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Colonial							
48	17	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
83	29	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Contemporary							
47	17	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
62	22	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX

(C)

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE – (Continued)

Lighting — (Continued)

(Rate Schedules SM, SH and PAL)

Lamp wattage as available on applicable rate schedule.

Wattage	Nominal kWh Energy Usage per Unit per Month	Application Period			
		06/01/2023 through 11/30/2023	12/01/2023 through 05/31/2024	06/01/2024 through 11/30/2024	12/01/2024 through 05/31/2025
Supply Charge ¢ per kWh		X.XXXX	X.XXXX	X.XXXX	X.XXXX
Fixture Charge — \$ per Month					
Mercury Vapor					
100	44	X.XX	X.XX	X.XX	X.XX
175	74	X.XX	X.XX	X.XX	X.XX
250	102	X.XX	X.XX	X.XX	X.XX
400	161	X.XX	X.XX	X.XX	X.XX
1000	386	X.XX	X.XX	X.XX	X.XX
High Pressure Sodium					
70	29	X.XX	X.XX	X.XX	X.XX
100	50	X.XX	X.XX	X.XX	X.XX
150	71	X.XX	X.XX	X.XX	X.XX
200	95	X.XX	X.XX	X.XX	X.XX
250	110	X.XX	X.XX	X.XX	X.XX
400	170	X.XX	X.XX	X.XX	X.XX
1000	387	X.XX	X.XX	X.XX	X.XX
Flood Lighting - Unmetered					
70	29	X.XX	X.XX	X.XX	X.XX
100	46	X.XX	X.XX	X.XX	X.XX
150	67	X.XX	X.XX	X.XX	X.XX
250	100	X.XX	X.XX	X.XX	X.XX
400	155	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Cobra Head					
45	16	X.XX	X.XX	X.XX	X.XX
60	21	X.XX	X.XX	X.XX	X.XX
95	34	X.XX	X.XX	X.XX	X.XX
139	49	X.XX	X.XX	X.XX	X.XX
219	77	X.XX	X.XX	X.XX	X.XX
275	97	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Colonial					
48	17	X.XX	X.XX	X.XX	X.XX
83	29	X.XX	X.XX	X.XX	X.XX
Light-Emitting Diode (LED) — Contemporary					
47	17	X.XX	X.XX	X.XX	X.XX
62	22	X.XX	X.XX	X.XX	X.XX

(C)

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

DEFAULT SERVICE SUPPLY RATE – (Continued)

The Company will provide default service supply under this Rider by obtaining the requirements from suppliers through competitive procurements using a Request for Proposal (“RFP”) competitive auction process. The charges for DSS calculated based on the results of the RFP competitive auction process for service under this Rider will be effective as defined above. (C)
(C)

DSS obtained through the RFP competitive auction process includes energy, capacity, transmission and distribution line losses, congestion and congestion management costs, all or some of the Alternative Energy Credits (“AECs”), ancillary services, PJM grid management charges and other such services or products that are required to provide default service to the Company’s customers including Auction Revenue Rights and Financial Transmission Rights (“ARRs/FTRs”). The Company may purchase and provide up to 27 MW for a portion of its AEC solar requirements associated with the default service load. The AECs provided by the Company for the applicable procurement group(s) will reduce the obligation of the suppliers in the RFP competitive auction. DSS shall not include transmission service within Duquesne’s zone. Duquesne will be responsible for and continue to provide network integration transmission service. The applicable charges for transmission service are defined in Appendix A of this Tariff. (C)
(C)
(C)

Service under this Rider No. 8 – Default Service Supply shall commence in accordance with the switching protocols in Rule No. 45.1.

PROCUREMENT PROCESS

The Company will conduct separate RFP competitive auction solicitations for DSS for each customer procurement group under this Rider. The customer procurement groups for the RFP competitive auction solicitations are defined as residential and lighting, small commercial and industrial and medium commercial and industrial. The small commercial and industrial group includes those customers with monthly metered demand less than 25 kW. The medium commercial and industrial group includes those customers with monthly metered demand equal to or greater than 25 kW and less than 200 kW. The RFP competitive auction process will be bid separately to ensure that there is no cross subsidization. (C)
(C)
(C)

The Company will update the rates for the DSS according to the schedule in the above tables. The Company will issue RFPs competitive auctions prior to the beginning of each Application Period to update the default service supply rates. The updated rates will be based on the new price(s) available from the winning suppliers through the RFP competitive auction process and the cost for Company solar contracts, if any, for the applicable procurement group(s). The rates will include a reconciliation adjustment as described in the “Calculation of Rate” section of this Rider. In the month prior to the beginning of each Application Period, the Company will file new DSS charges with the Pennsylvania Public Utility Commission (“Commission”) for the subsequent Application Period, and, upon Commission approval, these charges shall become effective on the first day of the following month. (C)
(C)

The load of the customer procurement group for the RFP competitive auction will be divided into Tranches. Winning suppliers will provide DSS for the percentage of DSS load corresponding to the number of Tranches won in the RFP competitive auction. Duquesne seeks to procure all Tranches in the RFP competitive auction process pursuant to the RFP competitive auction schedule approved by the Commission. (C)
(C)
(C)

The selection of bids will be submitted to the Commission for its approval or rejection within one business day after submittal. If the bids are not acted on by the Commission within one business day, the Company may proceed on the basis that they are approved and award the bids pursuant to 52 Pa. Code § 54.188(d).

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CONTINGENCY PLAN

In the event Duquesne receives bids for less than all Tranches or the Commission does not approve all or some of the submitted bids or in the event of supplier default, then Duquesne will provide the balance of the default supply for commercial and industrial customers through purchases in the PJM spot markets until such time that a different contingency plan is approved by the Commission. Duquesne will submit to the Commission within fifteen (15) days after any such occurrence an emergency plan to handle any default service shortfall. All costs associated with implementing the contingency plan will be included as part of the DSS described in the section below, "Calculation of Rate."

CALCULATION OF RATE

DSS rates shall be determined based on the formula described in this section. The DSS shall be filed with the Commission no less than sixty (60) days prior to the start of the next Application Period as defined under the Default Service Supply Rate section of this Rider. Rates are reconciled on a semi-annual basis in accordance with the Default Service Supply Rate section of this Rider. The rates shall include an adjustment to reconcile revenue and expense for each Application Period. The DSS shall be determined to the nearest one-thousandth of one (1) mill per kilowatt-hour in accordance with the formula set forth below and shall be applied to all kilowatt-hours billed for default service provided during the billing month:

$$DSS = [(CA + SLR + (DSS_a + E)/S) * F + (DSS_b/S)] * [1/(1 - T)] \tag{C}$$

Where:

DSS = Default Service Supply rate, converted to cents per kilowatt-hour, to be applied to each kilowatt-hour supplied to customers taking default service from the Company under this Rider.

CA = The weighted average of the winning bids received in a competitive ~~request for proposal auction~~ request for proposal competitive auction for each customer class identified above and described in the "Default Service Supply Rate" section and adjusted for customer class transmission and distribution line losses. ~~The request for proposal competitive auction shall be conducted as described in "Procurement Process."~~ The request for proposal competitive auction shall be conducted as described in "Procurement Process." (C)
(C)
(C)

DSS_a = The total estimated direct and indirect costs incurred by the Company to acquire DSS from any source on behalf of customers described above in the "Procurement Process." The Application Period shall be for each period over which the DSS, as computed, will apply. Projections of the Company's costs to acquire default supply for the Application Period shall include all direct and indirect costs of generation supply to be acquired by the Company from any source plus any associated default service supply-related procurement and administration costs. ~~Company costs may also include the expenses to support time-of-use ("TOU") programs offered by EGSs. Time-of-use expenses will be assigned to the applicable customer class for recovery through this Rider.~~ Default service supply-related costs shall include the cost of preparing the company's default service plan filing and working capital costs associated with default service supply. The Company will recover these costs over the default service plan period as defined in the Commission's order at Docket No. R-2018-3000124. (C)
(C)
(C)

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

- DSS_b** = Company costs may also include the expenses to support time-of-use (“TOU”) programs offered by the Company. Time-of-use expenses will be assigned to the applicable customer class for recovery through this Rider. (C)

- SLR** = The costs associated with any Commission-approved solar contracts and its administration will be recovered from the customers in the applicable procurement group(s) that have received an allocation of the AECs associated with the solar contracts. The proceeds of any solar energy, capacity, ancillary services and solar AECs that are acquired and in excess of those allocated to default service suppliers, and sold into the market, will be netted against solar contract costs.

- E** = Experienced net over or under collection for each customer procurement group based on the revenue and expense for the six (6) month period ending one-hundred twenty (120) days prior to the end of Application Period. The DSS rate effective June 1 shall include reconciliation of revenue and expense for the six (6) month period October through March. The DSS rate effective December 1 shall include reconciliation of revenue and expense for the six (6) month period April through July. Interest shall be computed monthly at the rate provided for in Title 52 Pa. Code §54.190(c), from the month the over collection or under collection occurs to the effective month that the over collection is refunded or the under collection is recouped.

- S** = The Company’s default service retail kWh sales to customers in the applicable Customer Class, projected for the Application Period.

- F** = Rate Factor only for the residential and lighting customer groups. The Rate Factor shall be 1.0 for all other customer groups. DSS for residential and lighting customer groups will be obtained in the same RFP competitive auction. The Rate Factor adjustment reflects the load shape of the residential and lighting classes. The Rate Factor will be as follows for each Application Period. (C)

Application Period	Residential	Lighting
<u>June 1, 2021 through May 31, 2022</u>	X.XXXX	X.XXXX
<u>June 1, 2022 through May 31, 2023</u>	X.XXXX	X.XXXX
<u>June 1, 2023 through May 31, 2024</u>	X.XXXX	X.XXXX
<u>June 1, 2024 through May 31, 2025</u>	X.XXXX	X.XXXX

(C)
(C)
(C)
(C)

- T** = The Pennsylvania gross receipts tax rate in effect during the billing month, expressed in decimal form.

The rate shall become effective for default supply service rendered on and after the beginning of the Application Period unless otherwise ordered by the Commission, and shall remain in effect for the effective periods defined above, unless revised on an interim basis subject to the approval of the Commission. Pursuant to 52 Pa. Code §69.1809(c), upon determination that the DSS, if left unchanged, would result in a material over or undercollection of supply-related costs incurred or expected to be incurred during the effective period, the Company may file with the Commission for an interim revision of the DSS to become effective thirty (30) days from the date of filing, unless otherwise ordered by the Commission.

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

(C)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

CALCULATION OF RATE – ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM

(C)

DSS Electric Vehicle Time-of-Use Pilot Program (“DSS EV-TOU”) rates shall be supplied via the same fixed price, full requirements (“FPFR”) products that provide default service supply for the applicable customer class. The DSS EV-TOU rates will be distinguished by three time periods throughout the year. The Off-Peak Period will consist of all hours every day from 11:00 PM through 6:00 AM. The On-Peak Period will consist of all hours every day from 1:00 PM through 9:00 PM. All other hours will be included in the Shoulder Period. The same On-Peak, Off-Peak, and Shoulder Periods will be applicable to all eligible DSS EV-TOU service customers.

(C)

The DSS EV-TOU rates shall be filed with the Commission no less than sixty (60) days prior to the start of the next Application Period as defined under the Default Service Supply Rate section of this Rider. Rates are reconciled on a semi-annual basis in accordance with the Default Service Supply Rate section of this Rider. The rates shall include an adjustment to reconcile revenue and expense for each Application Period. The DSS EV-TOU shall be determined to the nearest one-thousandth of one (1) mill per kilowatt-hour and shall be applied to all kilowatt-hours billed for DSS EV-TOU rates provided during the billing month.

(C)

During the pilot program, the DSS EV-TOU rates will apply to all load associated with the applicable meter.

(C)

$$DSS = [(CA + SLR + (DSS_a + E)/S) * F * TOU F + (DSS_b/S)] * [1/(1 - T)]$$

(C)

Where:

(C)

DSS = Default Service Supply rate as defined above, with the addition of the EV-TOU Rate Factors.

(C)

TOU F = EV-TOU Rate Factors (as defined below) will be utilized to derive the On-Peak, Shoulder, and Off-Peak rates for the customer class based on its respective energy consumption patterns and capacity requirements, as approved in the Company’s most recent DSP proceeding at Docket No.P-2020- XXXXXXX.

(C)

Electric Vehicle Time-of-Use Rate Factors									
Application Period	Residential RS, RH, RA			Small C&I ⁽¹⁾ GS, GM<25, GMH<25			Medium C&I GM & GMH ≥ 25kW < 200 kW		
	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾
June 1, 2021 through May 31, 2022	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2022 through May 31, 2023	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2023 through May 31, 2024	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2024 through May 31, 2025	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX

(C)

⁽¹⁾ Rate Schedule UMS is not eligible for the Electric Vehicle Time-of-Use Pilot Program.
⁽²⁾ Denotes On-Peak
⁽³⁾ Denotes Shoulder
⁽⁴⁾ Denotes Off-Peak

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

ANNUAL RECONCILIATION

The Company will file with the Commission an annual reconciliation statement of the revenues, expenses and resulting over and under recovery for the twelve (12) months beginning February 1 and ending January 31 of the following year, in accordance with 66 Pa. C.S. § 1307(e), by March 1 for each service class. An annual reconciliation statement shall be prepared separately for the Residential, Small Commercial & Industrial and Medium Commercial & Industrial customer classes.

The standard DSS rate and DSS EV-TOU over/under collections will be calculated in total for each procurement class. (C)

MISCELLANEOUS

Minimum bills shall not be reduced by reason of the DSS. DSS charges shall not be a part of the monthly rate schedule minimum nor be subject to any credits or discounts.

Application of the DSS shall be subject to continuous review and audit by the Commission at intervals it shall determine.

~~In compliance with Commission Order entered January 15, 2015, at Docket No. P-2014-2418242, Commission Order entered July 30, 2015, at Docket No. P-2015-2484590 and Commission Order entered January 28, 2016, at Docket No. P-2015-2506002, the Company is implementing a Time-of-Use ("TOU") service program.~~ (C)

~~The costs incurred by the Company to implement the TOU program, whether it's an EGS provided program or a DSS program, shall be included in the determination of the DSS rate for the Residential customer class as approved by Commission Order entered January 28, 2016, at Docket No. P-2015-2506002.~~ (C)

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 9 – DAY-AHEAD HOURLY PRICE SERVICE

(Applicable to Rates GS/GM, GMH, GL, GLH, L and HVPS and Generating Station Service)

Day-ahead hourly price service provides medium (≥ 200 kW) and large commercial and industrial customers with the ability to purchase their electric supply requirements on a day-ahead hourly basis. Duquesne Light shall evaluate the customer's twelve (12) most recent months of monthly billing demand for that customer available in October of the preceding year. If the customer's average monthly billing demand is greater than or equal to 200 kW, the customer will be assigned to Rider No. 9 effective with their June billing. The Company will supply electricity under this rider by obtaining the requirements based on a request for proposal ("RFP") competitive auction. This rider is also available for the supply of electricity to generating stations that are not otherwise self-supplying and where the generating station is not otherwise receiving service from an EGS. Metering equipment must be installed at the generating station at the expense of the customer.

(C)

MONTHLY CHARGES

Energy charges are hourly and provided at the day-ahead PJM locational marginal prices ("LMP") based on the customer's real time metered hourly load, plus energy-related ancillary services including PJM administrative charges, adjusted for losses, plus a fixed retail administrative charge. PJM posts the day-ahead locational marginal price on their web site at 4:00 PM EPT. Capacity charges are equal to the full PJM Reliability Pricing Model ("RPM") capacity price for the Duquesne Zone, and shall recover the charges associated with the customer's share of the Company's capacity obligation assigned by PJM, plus the charges for capacity based ancillary services. Energy and capacity charges will be calculated using the following formula and adjusted for the Pennsylvania Gross Receipts Tax (GRT) in effect.

End Hour

$$\sum L_{RTt} * (1 + ADJ_t) * (LMP_{Dat} + OR_{Dat}) +$$

t=Start Hour

End Hour

$$\sum [(L_{RTt} * (1 + ADJ_t)) * (SR_{RTt} + REG_{RTt} + SCN_{RTt} + S1A) + L_{RTt} * (PJM_S + FRA)] +$$

t=Start Hour

End Day

$$\sum [(CO_D * CChg_D) + NPLC_D * (R_D + B_D)]$$

D=Start Day

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 9 – DAY-AHEAD HOURLY PRICE SERVICE – (Continued)

(Applicable to Rates GS/GM, GMH, GL, GLH, L and HVPS and Generating Station Service)

MONTHLY CHARGES – (Continued)

PJM Ancillary Service Charges and Other PJM Charges – (Continued)

- PJM_S**= PJM Surcharge is a pass-through of the charges incurred by the Company for grid management and administrative costs associated with membership and operation in PJM. These are the charges incurred by the Company under PJM Schedules 9 and 10 to provide hourly price service.
- R_D** = Reactive supply service charge in \$/MW-day to serve the customer's load as calculated under the PJM Tariff Schedule 2.
- B_D** = Blackstart service charge in \$/MW-day to serve the customer's load as calculated under the PJM Tariff Schedule 6A.

Fixed Retail Administrative Charge

FRA = The Fixed Retail Administrative Charge in \$ per MWH. The Fixed Retail Administrative Charge consists of the sum of administrative charges for the suppliers providing hourly price service (as determined by a competitive solicitation process) and for the Company to obtain supply and administer this service. Default service supply-related costs shall include the cost of preparing the company's default service plan filing and working capital costs associated with default service supply. The Company will recover these costs over the default service plan period as defined in the Commission's order at Docket No.R-2018-3000124.

The supplier charges shall be based on the winning bids in the Company's most recent solicitation for supply of hourly price default service.

The Company's administrative charges shall be based on an amortization of the costs incurred by the Company to acquire generation supply from any source for the Medium (≥ 200 kW) Customer Class and Large C&I Customer Class during the most recent twelve-month (12-month) period ended May 31st (as determined by amortizing such costs over a 12-month period) plus the amortization of the cost of administering the hourly price service over the duration of the default service plan, including any unbundled costs of preparing the Company's default service plan filing and working capital costs associated with default service supply.

This charge shall also include the Company's costs associated with any Commission approved solar contracts and its administration, if applicable, in \$ per MWh. The proceeds of any solar energy, capacity, ancillary services and solar AECs that are acquired and in excess of those allocated to default service suppliers, and sold into the market, will be netted against solar contract costs.

Application Period	FRA \$/MWH
<u>June 1, 2021 through May 31, 2022</u>	\$X.XX
<u>June 1, 2022 through May 31, 2023</u>	\$X.XX
<u>June 1, 2023 through May 31, 2024</u>	\$X.XX
<u>June 1, 2024 through May 31, 2025</u>	\$X.XX

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(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 9 – DAY-AHEAD HOURLY PRICE SERVICE – (Continued)

(Applicable to Rates GS/GM, GMH, GL, GLH, L and HVPS and Generating Station Service)

MONTHLY CHARGES – (Continued)

Customer's Capacity Obligation and Network Service Peak Load

CO_D = Capacity Obligation in MW for each day associated with supporting the customer's load as described in the section "Determination of Capacity Obligation.

NPLC_D = The customer's daily network service coincident peak load contribution in MW. This quantity is determined based on the customer's load coincident with the annual peak of the Duquesne Zone (single coincident peak) as defined in the PJM Tariff Section 34.1.

Capacity Charges

CChg_D = The demand charge in \$/MW-day, which is equal to the full PJM RPM Final Zonal Capacity Price for the Duquesne Zone.

PJM bills these charges to the Company as a function of the load measured in megawatts (MW) and expresses these charges as \$/MW, \$/MWH and \$/MW-day. The Company measures the customer's load and energy usage in kilowatts (kW) and will convert the above charges to \$/kW, \$/kWh and \$/kW-day for the purposes of computing the customer's monthly bill.

PROCUREMENT PROCESS

The Company will conduct a competitive request for proposal ("~~RFP~~") auction to obtain day-ahead hourly price service under this rider. The winning bidder(s) will be responsible for providing default service supply at PJM day-ahead energy prices, capacity, ancillary services, and other PJM management charges as defined above. The winning supplier(s) will be the supplier(s) who bids the lowest price(s) in this solicitation in \$/MWH to cover the costs of renewable energy supply, energy balancing, and supplier administrative costs.

(C)

CONTINGENCY PLAN

In the event Duquesne does not receive bids, the Commission does not approve the submitted bid(s) or a supplier defaults, Duquesne will provide default supply for commercial and industrial customers through purchases in accordance with the above formula and process. The Company will pass-through the costs it incurs to provide the renewable energy requirements, energy balancing and any administrative costs in addition to those costs otherwise recovered through the Fixed Retail Administrative Charge described in the "Monthly Charges" section of this rider. All revenue and expense associated with the contingency plan will be reconciled as described in the "Annual Reconciliation" section of this rider.

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 21 – NET METERING SERVICE – (Continued)

(Applicable to Rates RS, RH, RA, GS/GM, GMH and GL)

BILLING PROVISIONS - (Continued)

- 2. If the Company supplies more kilowatt-hours of electricity than the customer-generator facility feeds back to the Company's system during the billing period, all charges of the appropriate rate schedule shall be applied to the net kilowatt-hours of electricity that the Company supplied. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.
- 3. For customer-generators involved in virtual meter aggregation programs, a credit shall be applied first to the meter through which the generating facility supplies electricity to the distribution system, then through the remaining meters for the customer-generator's account equally at each meter's designated rate. Virtual meter aggregation is the combination of readings and billing for all meters regardless of rate class on properties owned or leased and operated by a customer-generator by means of the Company's billing process, rather than through physical rewiring of the customer-generator's property for a physical, single point of contact. The customer-generators are responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.

BILLING PROVISIONS FOR
ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM ("EV-TOU") CUSTOMER GENERATORS

(C)

(Applicable to Rates RS, RH, RA, GS/GM and GMH)

(C)

The following billing provisions apply to customer-generators that take service on Rider No 8 – Default Service Supply and are on EV-TOU rates.

(C)

- 1. The EV-TOU customer-generator will receive a credit for each kilowatt-hour received by the Company up to the total amount of electricity delivered to the Customer during the billing period at the full retail rate consistent with Commission regulations. If an EV-TOU customer-generator supplies more electricity to the Company than the Company delivers to the customer-generator in a given billing period, the Company will maintain an active record of the excess kilowatt hours produced at the customer-generators premise in a "bank". If an EV-TOU customer-generator supplies more electricity to the Company than the Company delivers to the customer-generator in a given billing period, the excess kilowatt hours shall be carried forward and credited against the EV-TOU customer generator's usage in a subsequent billing period at the full retail rate. If, in a subsequent billing period, a customer consumes more electricity than produced, kilowatt-hours will be pulled from the customer's bank on a first in first out basis. Any excess kilowatt hours shall continue to accumulate and credit against usage for the 12 month period ending May 31st. On an annual basis, the Company will compensate the customer-generator for kilowatt-hours remaining in the bank on May 31st, at the applicable Price To Compare at the time the excess kilowatt-hours were banked. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.

(C)

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 21 – NET METERING SERVICE – (Continued)

(Applicable to Rates RS, RH, RA, GS/GM, GMH and GL)

BILLING PROVISIONS FOR
ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM (“EV-TOU”) CUSTOMER GENERATORS

(C)

(Applicable to Rates RS, RH, RA, GS/GM and GMH)

(C)

- (Continued)

(C)

- 2. If the Company supplies more kilowatt-hours of electricity than the customer-generator supplies during the billing period, all charges of the appropriate rate schedule shall be applied to the net kilowatt-hours of electricity that the Company supplied. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.
- 3. If an eligible customer-generator wishes to no longer be enrolled in the EV-TOU Pilot Program and switches to the standard default service supply product, any excess kilowatt hours banked and remaining from the EV-TOU period will be used, as applicable, for the remaining portion of the 12 month period ending May 31 and the Company shall compensate for any excess kilowatt hours that are banked at the Price To Compare in effect at the time.

(C)

(C)

NET METERING PROVISIONS FOR SHOPPING CUSTOMERS

(C)

- 1. Customer-generators may take net metering services from EGSs that offer such services.
- 2. If a net-metering customer takes service from an EGS, the Company will credit the customer for distribution charges for each kilowatt hour produced by the customer-generator, up to the total amount of kilowatt-hours delivered to the customer by the Company during the billing period. If a customer-generator supplies more electricity to the electric distribution system than the Company delivers to the customer-generator in a given billing period, the excess kilowatt hours shall be carried forward and credited against the customer-generator’s usage in subsequent billing periods at the Company’s distribution rates. Any excess kilowatt hours shall continue to accumulate for the 12 month period ending May 31. Any excess kilowatt hours at the end of the 12 month period will not carry over to the next year for distribution charge purposes. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.
- 3. If the Company delivers more kilowatt-hours of electricity than the customer-generator facility feeds back to the Company’s system during the billing period, all charges of the applicable rate schedule shall be applied to the net kilowatt-hours of electricity that the Company delivered. The customer-generator is responsible for the customer charge, demand charge and other applicable charges under the applicable Rate Schedule.

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

STANDARD CONTRACT RIDERS - (Continued)

(C)

RIDER NO. 21 – NET METERING SERVICE – (Continued)

(Applicable to Rates RS, RH, RA, GS/GM, GMH and GL)

NET METERING PROVISIONS FOR SHOPPING CUSTOMERS – (Continued)

4. Pursuant to Commission regulations, the credit or compensation terms for excess electricity produced by customer-generators who are customers of EGSs shall be stated in the service agreement between the customer-generator and the EGS. The Company will provide the customer-generator with a statement of monthly kilowatt hour usage for the 12 month period ending May 31 for the purpose of the customer-generator seeking credit or compensation from the EGS.
5. If a customer-generator switches electricity suppliers, the Company shall treat the end of the service period as if it were the end of the year.

APPLICATION

Customer-generators seeking to receive service under the provisions of this Rider must submit a written application to the Company demonstrating compliance with the Net Metering Rider provisions and quantifying the total rated generating capacity of the customer-generator facility.

MINIMUM CHARGE

The Minimum Charges under Rate Schedule RS, RH, RA, GS/GM, GMH and GL apply for installations under this Rider.

RIDERS

Bills rendered by the Company under this Rider shall be subject to charges stated in any other applicable Rider.

(C) – Indicates Change

ISSUED: XXXXXXXX XX, XXXX

EFFECTIVE: XXXX XX, XXXX

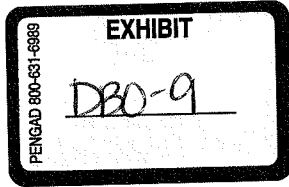


Exhibit DBO-9

SUPPLEMENT NO. XX
TO ELECTRIC – PA. P.U.C. NO. 3S

DUQUESNE LIGHT COMPANY

ELECTRIC GENERATION SUPPLIER COORDINATION TARIFF

Issued By

DUQUESNE LIGHT COMPANY

411 Seventh Avenue
Pittsburgh, PA 15219

Steven E. Malnight
President and Chief Executive Officer

Issued: xxxxxxxx xx, XXXX

Effective: xxxx xx, XXXX

Issued pursuant to the Commission's Order
entered xxxxxxxx XX, XXXX, at Docket No. P-2020-XXXXXXX.

NOTICE

**THIS TARIFF SUPPLEMENT UPDATES THE TABLE OF CONTENTS,
ADDS AND REMOVES PAGES FROM TARIFF NO. 3S AND UPDATES LANGUAGE
IN EXISTING RULES AND EXISTING RIDERS**

See Page Two

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Table of Contents

**Twelfth Revised Page No. 3
Cancelling Eleventh Revised Page No. 3**

Page numbers 2A – 2F have been added to Tariff No. 3S.

The List of Modifications page numbers have been revised in the Table of Contents to reflect the addition of page numbers 2A through 2F.

Explanation of Terms and Explanation of Abbreviations

**Fourth Revised Page No. 5
Cancelling Third Revised Page No. 5**

Creditworthy
Customer(s)
Dual Billing

**First Revised Page No. 5A
Cancelling Original Page No. 5A**

EGS Tariff
Electric Distribution Company ("EDC")
Electric Generation Supplier ("EGS")

**Fifth Revised Page No. 6
Cancelling Fourth Revised Page No. 6**

PowerMeter
InSchedules

**Fifth Revised Page No. 6A
Cancelling Fourth Revised Page No. 6A**

Scheduling Coordinator

**Second Revised Page No. 6B
Cancelling First Revised Page No. 6B**

Wholesale Supplier

Definitions have been updated to reflect housekeeping/administerial revisions as well as current business practice.

Rules and Regulations

**Second Revised Page No. 7
Cancelling First Revised Page No. 7**

1. The Tariff

1.1 Filing and Posting

Language has been revised to remove "duquesnelight" and insert "customer-choice."

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations **First Revised Page No. 9**
3. Commencement of EDC/EGS Coordination **Cancelling Original Page No. 9**
3.1 Registration for Coordination Services

Language has been revised to remove "consisting of" and replace it with "including."

Language has been revised and/or added to Item C through Item G to reflect current business practice.

Rules and Regulations **Second Revised Page No.10**
3. Commencement of EDC/EGS Coordination **Cancelling First Revised Page No. 10**
3.9 Identification Numbers

Language has been added to reflect current business practice.

Rules and Regulations **Third Revised Page No.12**
4. Coordination Obligations **Cancelling Second Revised Page No. 12**
and First Revised Page Nos. 13A and 13B
4.11.2 Electronic Mail

Language has been added to correct a typographical error.

Rules and Regulations **Third Revised Page No.12**
4. Coordination Obligations **Cancelling Second Revised Page No. 12**
and First Revised Page Nos. 13A and 13B
4.12 Payment Obligation

Language has been revised to add the word "EGS." Administerial revision, capitalizing the "T" in tariff.

This Page Intentionally Left Blank **First Revised Page No. 13A**
Cancelling Original Page No. 13A

This Page Intentionally Left Blank **First Revised Page No. 13B**
Cancelling Original Page No. 13B

First Revised Page No. 13A and First Revised Page No.13B have been removed from Tariff No. 3S as they are no longer necessary. Both pages are being cancelled out via Third Revised Page No. 12.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations Third Revised Page No. 14
5. Direct Access Procedures Cancelling Second Revised Page No. 14
5.1.2 B. - No. 1) Network Transmission Service Peak Load Contribution (1 CP)

Rules and Regulations Fifth Revised Page No. 15
5. Direct Access Procedures Cancelling Fourth Revised Page No. 15 and Second Revised Page No. 15A
5.1.2 B. - No. 2) Peak Load Contribution (5 CP)

Language has been added to reflect current business practice.

This Page Intentionally Left Blank Second Revised Page No. 15A
Cancelling First Revised Page No. 15A

Second Revised Page No. 15A has been removed from Tariff No. 3S as it is no longer necessary. The page is being cancelled out via Fifth Revised Page No. 15.

Rules and Regulations Sixth Revised Page No. 17
5. Direct Access Procedures Cancelling Fifth Revised Page No. 17
5.2 Switching Among EGSs and The Company
5.2.1
5.2.3
5.2.5

Rules and Regulations Sixth Revised Page No. 18
5. Direct Access Procedures Cancelling Fifth Revised Page No. 18
5.2 Switching Among EGSs and The Company
5.2.5 – (Continued)

Rules and Regulations Sixth Revised Page No. 19
5. Direct Access Procedures Cancelling Fifth Revised Page No. 19
5.2 Switching Among EGSs and The Company
5.2.8

Rules and Regulations Fifth Revised Page No. 19A
5. Direct Access Procedures Cancelling Fourth Revised Page No. 19A
5.2 Switching Among EGSs and The Company
5.2.9

Language has been revised for clarity and to reflect current business practice.

Rules and Regulations Sixth Revised Page No. 19B
5. Direct Access Procedures Cancelling Fifth Revised Page No. 19B
5.2 Switching Among EGSs and The Company
5.2.11

Rule No. 5.2.11 has been reorganized and renumbered to Rule 5.4.4 for clarity.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations
5. Direct Access Procedures
5.4 Provisions Relating To An EGS's Customers
5.4.4

Fourth Revised Page No. 20
Cancelling Third Revised Page No. 20

Rule No. 5.4.4 has been renumbered from Rule 5.2.11.

Rules and Regulations
6. Load Forecasting
6.2.1 Forecasts for Monthly or Daily Metered and Unmetered – (Such As Streetlights) Customers
6.2.3 Historical Load Profile Data

Second Revised Page No. 21
Cancelling First Revised Page No. 21

Rules and Regulations
6. Load Forecasting
6.4 Forecasting Process
6.4.1 Daily Forecasts

Second Revised Page No. 22
Cancelling First Revised Page No. 22

Language has been revised and/or added for clarity.

Rules and Regulations
7. Day After Load Estimates and Supply Schedules
7.1 Total Day After Load Estimates

Third Revised Page No. 24
Cancelling Second Revised Page No. 24

7.2 Daily Load Scheduling Process (Day After Load Obligations)
7.2.1 Uploading Schedules
7.2.2 Load Schedule Changes

Language has been added and/or revised to reflect current business practice.

Rules and Regulations
8. Reconciliation
8.1 General Description

Third Revised Page No. 25
Cancelling Second Revised Page No. 25

The word "at" has been removed and replaced with the word "of."

Rules and Regulations
11. Confidentiality of Information
11. Generally

First Revised Page No. 29
Cancelling Original Page No. 29

Language has been added and/or removed for clarity.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations Seventh Revised Page No. 30
12. Payment and Billing Cancelling Sixth Revised Page No. 30
12.1 Customer Billing By The Company
12.1.5 Company Reimbursement to EGS for Customer Payments

Rules and Regulations Fifth Revised Page No. 30A
12. Payment and Billing Cancelling Fourth Revised Page No. 30A
12.1 Customer Billing By The Company
12.1.7 Purchase of EGS Receivables (POR) Program
12.1.7.1 Eligibility Requirements
12.1.7.2 Purchase Price Discount

Rules and Regulations Sixth Revised Page No. 30B
12. Payment and Billing Cancelling Fifth Revised Page No. 30B
12.1.7 Purchase of EGS Receivables (POR) Program
12.1.7.2.2 Purchase Price Discount Adjustment for Individual EGS
12.1.7.4 Other Payment Provisions

Rules and Regulations Fourth Revised Page No. 30C
12. Payment and Billing Cancelling Third Revised Page No. 30C
12.1.7 Purchase of EGS Receivables (POR) Program
12.1.7.5 Transfer of Collection Responsibilities and Rights

Rules and Regulations First Revised Page No. 31
12. Payment and Billing Cancelling Original Page No. 31
12.2.2 Billing Corrections and Estimated Billings
12.2.5.1 EGS Offset

Language has been updated for housekeeping/administerial revisions as well as added and/or removed to reflect current business practice.

Rules and Regulations Fifth Revised Page No. 30A
12. Payment and Billing Cancelling Fourth Revised Page No. 30A
12.1 Customer Billing By The Company
12.1.7 Purchase of EGS Receivables (POR) Program

The dates of the Purchase of Receivables Program ("POR") have been updated to reflect the term of DSP IX.

Rules and Regulations First Revised Page No. 31
12. Payment and Billing Cancelling Original Page No. 31
12.2.2 Billing Corrections and Estimated Billings

Language has been revised to align the period during which bills are subject to correction with the time period applicable to previously unbilled utility service, 52 Pa. Code § 56.14.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations

- 13. Withdrawal By EGS From Retail Service**
13.2 Notice to Customers

First Revised Page No. 33
Cancelling Original Page No. 33

Language has been added to reflect current business practice.

Rules and Regulations

- 14. Discontinuance of EGS Service to Particular Customers**
14.4.1 Customer Must Initiate The Switch to Default Service

Sixth Revised Page No. 34
Cancelling Fifth Revised Page No. 34

Language has been updated for housekeeping/administerial revisions as well as added and/or removed to implement, in part, the Company's proposed Customer Assistance Shopping Program.

Rules and Regulations

- 15. Liability**
15.4 Tax Indemnification

First Revised Page No. 36
Cancelling Original Page No. 36

Language has been updated for housekeeping/administerial revisions.

Rules and Regulations

- Load Data Supply Charge**
-Method of Payment

Fourth Revised Page No. 42A
Cancelling Third Revised Page No. 42A

Language has been revised in the "Method of Payment" section to update the mailing address.

Language has been revised in regard to payment through a wire/ACH transfer in the "Method of Payment" section.

The Company's banking information has been removed from the bottom of the "Method of Payment" section.

Rules and Regulations

- Standard Offer Program Cost Recovery**
-Background
-Supplier Charges

Fourth Revised Page No. 42B
Cancelling Third Revised Page No. 42B

Language has been revised to reflect DSP IX.

Rules and Regulations

- Standard Offer Program Cost Recovery**
-Customer Acquisition Fee

Fourth Revised Page No. 42B
Cancelling Third Revised Page No. 42B

The Customer Acquisition fee has increased from \$10.28 to \$30.00 in DSP IX.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

**Rules and Regulations
Standard Offer Program Cost Recovery
-Billing and Payment**

**Fourth Revised Page No. 42B
Cancelling Third Revised Page No. 42B**

Language has been revised in the "Billing and Payment" section to update the mailing address.

Language has been revised in regard to payment through a wire/ACH transfer in the "Billing and Payment" section.

The Company's banking information has been removed from the bottom of the "Billing and Payment" section.

**Table 1
Real Power Distribution Losses**

**Third Revised Page No. 49
Cancelling Second Revised Page No. 49**

Table 1 was modified to remove the < 138 kV language from Rate L – Large Power Service and to remove the line item for Rate L – Large Power Service ≥ 138 kV to make the loss provisions consistent with rate design changes approved and reflected in the Company's retail electric tariff as per the Company's 2018 base rate case at Docket No. R-2018-3000124, Order Entered December 20, 2018.

The MTS – Municipal Traffic Signals line item has been revised to UMS – Unmetered Service, consistent with the current designation of that customer class in the Company's retail electric tariff.

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(C)

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(C) – Indicates Change

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

Coordination Services Charges - All charges stated in the charges section of this tariff, that are billed by the Company for Coordination Services performed hereunder.

Coordinated Supplier - An Electric Generation Supplier that has appointed a Scheduling Coordinator as its designated agent for the purpose of submitting energy schedules to the PJM OI.

Creditworthy - A creditworthy EGS pays the Company's charges as and when due and otherwise complies with the Rules and Regulations of this tariff and the Pennsylvania Public Utility Commission. To determine whether an EGS is creditworthy, the Company will evaluate the EGS's record of paying Company charges, and may also take into consideration the EGS's credit history. (C)

Customer(s) - Any person, partnership, association, corporation, municipality, government agency, or other legal entity receiving, or eligible to receive, Competitive Generation Service from an EGS in accordance with the Competition Act. (C)

Customer Choice Internet Site - A Company Internet site with a Uniform Resource Locator (URL) of <http://www.customer-choice.com>.

Default Service - The Company will provide electricity to the customer in the event that a customer: 1) elects not to obtain electricity from an EGS; 2) elects to have the Company supply electricity after having previously purchased electricity from an EGS; 3) contracts with an EGS who fails to supply electricity, or 4) has been returned to Default Service by the EGS under circumstances as described in Rule No. 45.2 of the Company's retail tariff.

Deliver - To "deliver" a document or other item under this tariff shall mean to tender by certified mail, hand delivery, or overnight express package delivery service.

Delivery - The actual delivery of energy with respect to an energy schedule.

Demand Response - The process for arranging to have firm load become interruptible in accordance with criteria established by the PJM OI.

Direct Access - "Direct Access" shall have the meaning set forth in the Competition Act.

DLCO Zone - The PJM defined area encompassing the franchised service territories of the Duquesne Light Company.

DLCO Residual Zone - The PJM defined area encompassing the aggregate of all load buses within the franchised service territories of the Duquesne Light Company minus all load that has been designated to be priced at a specific nodal location.

Dual Billing - A billing service option where the Company and the EGS separately send their bills directly to the Customer. (C)

EDC Tariff - The Company's current Pennsylvania Public Utility Commission approved Electric Service Tariff.

EGS Representative - Any officer, director, employee, consultant, contractor, or other agent or representative of an EGS in connection with the EGS's activity as an EGS. To the extent an EGS is a division or group of a company, the term EGS Representative does not include any person in that company who is not part of the EGS division. (C)

(C) - Indicates Change

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

EGS Tariff – This Electric Generation Supplier Coordination Tariff, Electric-Pa. P.U.C. No. 3S.

(C)

Electric Distribution Company (EDC) - A public utility providing facilities for the distribution of electricity to retail Customers.

(C)

Electric Generation Supplier (EGS) - A supplier of electric generation that has been certified or licensed by the Pennsylvania Public Utility Commission to sell electricity to retail customers within the Commonwealth of Pennsylvania in accordance with the Competition Act. Duquesne Light Company does not constitute an EGS for the purposes of this tariff.

(C)

Electronic Data Exchange Working Group (EDEWG) - The Pennsylvania Public Utility Commission authorized working group established under the Proposed Standards for Electronic Data Transfer and Exchange Between EDCs and EGSs, Docket No. M-00960890F.0015.

Electronic Data Interchange (EDI) - The computer application to computer application exchange of business information in a standard format, as more fully described in Pennsylvania Public Utility Commission Docket No. M-00960890F.0015.

(C) – Indicates Change

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

Electronic Exchange - Approved methods of data exchange (either through a VAN mailbox or a method to be defined by the EDEWG and approved by the Pennsylvania Public Utility Commission).

Electricity Provider - The term refers collectively to the EDC, EGS, electricity supplier, marketer, aggregator and/or broker, as well as any third party acting on behalf of these entities.

PowerMeter System - Software program administered by the PJM OI that retrieves revenue meter data for PJM transmission and generation interconnection points and calculates Electric Distribution Companies' and Generation Owners' metered interchange energy amounts used for real-time energy market settlements. (C)

InSchedules - Software program administered by the PJM OI through which energy schedules may be submitted. (C)

FERC - The Federal Energy Regulatory Commission.

Final Forecast - The day ahead hourly forecast for energy to be supplied the next day.

Individual Coordination Agreement (ICA) - The agreement between the Company and the EGS to conduct business in the DLCO Zone. The ICA is attached as a Rider to this tariff.

Interest Index - An annual interest rate determined by the average of 1-Year Treasury Bills for September, October and November of the previous year.

Interval Metering Data - Data from electrical metering equipment that supplies hourly or sub-hourly readings of customer consumption.

Kilowatt or kW - Unit of measurement of useful power equivalent to 1000 watts.

Meter Read Date - The date on which the Company reads a meter for purposes of switching for an off-cycle switch or producing a customer bill in accordance with the regularly scheduled billing cycles of the Company.

Month - A month, as defined under 52 PA Code § 56.2.

Load Bus - As used in this tariff, shall have the same meaning ascribed to the term in the PJM Tariff.

Load Serving Entity (LSE) - An entity that has been granted the authority or has an obligation pursuant to State or local law, regulation or franchise to sell electric energy to end-users located within the PJM Control Area as that term is defined by the PJM Tariff.

Locational Marginal Price (LMP) - The hourly-integrated marginal price to serve load at individual locations throughout PJM, calculated by the PJM OI as specified in the PJM Tariff.

Megawatt or MW - One thousand kilowatts.

NERC - The North American Electric Reliability Corporation. The agency given the authority by FERC to enforce reliability standards in the United States.

Network Integration Transmission Service Reservation - A reservation under the PJM Tariff of Network Integration Transmission Service, which allows a transmission customer to integrate and economically dispatch generation resources located at one or more points in the PJM Control Area to serve its Network load as that term is defined by the PJM Tariff.

(C) - Indicates Change

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

Peak Load Contributions (PLCs) - A customer's contribution to the DLCO Zone's normalized summer peak load as calculated by the zone's Electric Distribution Company and used in determining a Load Serving Entity's Peak Load obligation.

Pennsylvania Public Utility Commission or Commission - The Pennsylvania Public Utility Commission.

PJM - PJM Interconnection, L.L.C.

PJM Control Area - The area encompassing electric systems recognized by the North American Electric Reliability Council as the "PJM Control Area."

PJM Miscellaneous Charges - PJM miscellaneous energy related allocations or charges or credits billed to the EDC and not to the LSE.

PJM OI - The PJM Office of Interconnection, the system operator for the PJM Control Area.

PJM Tariff or OATT - The PJM Open Access Transmission Tariff on file with the FERC and which sets forth the rates, terms and conditions of transmission service over transmission facilities located in the PJM Control Area.

Preliminary Forecast - The forecast per hour per LSE posted on the customer choice website based on business day-ahead.

Rate Ready - A form of consolidated billing where Duquesne Light calculates the charge to be presented on the supplier portion of the bill based upon the rates previously supplied by the electric generation supplier ("EGS").

Retail Load Responsibility (RLR) - For non-metered and monthly metered load, the sum total of the estimated hourly load plus transmission losses, distribution losses and the EGS's pro rata share of UFE within the service territory of the EDC, for which the EGS must provide energy to its customers. For hourly metered customers, the sum total of the hourly consumed load of all of an EGS's customers, adjusted for transmission losses, distribution losses and the EGS's pro rata share of UFE within the service territory of the EDC, for which the EGS must provide energy to its customers.

Scheduling Coordinator - Entity that performs, and had been duly certified or licensed by the Pennsylvania Public Utility Commission to perform, one or more of an EGS's Coordination Obligations, including the submission of energy schedules to the PJM OI, and that either is (1) a member of the PJM Interconnection, L.L.C. or (2) is the agent, for scheduling purposes, of one or more Electric Generation Suppliers that are members of the PJM Interconnection, L.L.C. (C)

Tariff - This Electric Generation Supplier Coordination Tariff.

Transmission Losses - Real Power Transmission Losses are associated with all transmission service. The Transmission Provider is not obligated to provide Real Power Losses. The Transmission Customer is responsible for replacing losses associated with all transmission service as calculated by the Transmission Provider. The applicable Real Power Transmission Loss factor is defined in Rule No. 4.7.

(C) - Indicates Change

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

Unaccounted for Energy (UFE) - Is the difference between the actual DLCO Zone's total hourly system load and the total hourly consumed power grossed up for transmission and distribution losses plus any PJM miscellaneous energy or energy related allocations to the EDC.

Value Added Network (VAN) - A method of data transfer that allows information to be sent and received electronically using an electronic mailbox. This method meets minimum criteria in the following areas:

- Security and/or encryption of transactions and customer information;
- Proof of transmission and receipt;
- Positive identity of sender and recipient (non-repudiation);
- Reliability;
- Data and file integrity;
- Network performance and availability; and
- Recoverability and archiving of data.

Wholesale Load Responsibility (WLR) – For non-metered and monthly metered load, the sum total of the estimated hourly load for all of the Company's default service customers plus transmission losses, distribution losses, and the wholesale supplier's pro rata share of UFE, within the service territory of the EDC, for which the Company's wholesale suppliers must provide energy to its default service under the EDC Retail Tariff. For hourly metered customers, the sum total of the hourly consumed load of all the Company's default service customers plus transmission losses, distribution losses and the wholesale supplier's pro rata share of UFE within the service territory of the EDC, for which the Company's wholesale suppliers must provide energy to its default service under the EDC Retail Tariff.

Wholesale Supplier – The Company's supplier of generation resources necessary to meet the Company's default service obligations.

(C)

(C) – Indicates Change

RULES AND REGULATIONS

1. THE TARIFF

1.1 FILING AND POSTING A copy of this tariff, comprising of the Definitions, Rules and Regulations, Charges and Riders, under which the Company will provide Coordination Services to Electric Generation Suppliers, is filed with the Pennsylvania Public Utility Commission ("PaPUC"). A copy of the Tariff may be obtained by calling, e-mailing or writing the Company's business office. The Tariff may also be accessed at www.customer-choice.com and is posted and open to inspection at the offices of the Company where payments are made by customers.

(C)

1.2 REVISIONS This tariff may be revised, amended, supplemented or otherwise changed from time to time in accordance with the Pennsylvania Public Utility Code, and such changes, when effective, shall have the same force as the present tariff.

1.3 APPLICATION The tariff provisions apply to all EGSs providing Competitive Energy Supply to customers located in the Company's service territory, including an affiliate or division of the Company that provides Competitive Energy Supply, and with whom the Company has executed an Individual Coordination Agreement as required herein. In addition, the charges herein shall apply to anyone receiving service unlawfully or to any unauthorized or fraudulent receipt of Coordination Services.

1.4 RULES AND REGULATIONS The Rules and Regulations, filed as part of this tariff, are a part of every Individual Coordination Agreement entered into by the Company pursuant to this tariff and govern all Coordination Activities, unless specifically modified by a charge or rider provision. The obligations imposed on EGSs in the Rules and Regulations apply as well to everyone receiving service unlawfully or to any unauthorized or fraudulent receipt of Coordination Services.

1.5 USE OF RIDERS The terms governing the supply of Coordination Services under this tariff or a charge therein may be modified or amended only by the application of those standard riders, filed as part of this tariff.

1.6 STATEMENT BY AGENTS No Company representative has authority to modify a tariff rule or provision, or to bind the Company by any promise or representation contrary thereto.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

3. COMMENCEMENT OF EDC/EGS COORDINATION

3.1 REGISTRATION FOR COORDINATION SERVICES An EGS seeking to obtain Coordination Services hereunder must deliver to the Company a completed registration, including the following: (C)

- A. An Individual Coordination Agreement, as contained in a rider hereto, fully executed in triplicate by a duly authorized representative of the EGS;
- B. A copy of the EGS's operating license or Pennsylvania Public Utility Commission order licensing the EGS to operate;
- C. The EGS's completed IRS Form W-9; (C)
- D. The EGS's completed EGS Onboarding Form, including: (C)
 - (i) The Dun & Bradstreet number(s) assigned to the EGS;
 - (ii) The EGS's banking information (account number, routing number, etc.), provided on EGS letterhead and signed by two authorized EGS representatives;
- E. The EGS's Pennsylvania sales tax identification number; (C)
- F. EGS proof of PJM membership; and (C)
- G. Any other completed documents as necessary to comply with PaPUC or PJM requirements. (C)

3.2 INCOMPLETE REGISTRATIONS In the event the EGS submits an incomplete registration, the Company shall provide written notice to the EGS of the registration's deficiencies within ten (10) business days after the date of service, as determined under 52 Pa. Code § 1.56. The Company will not process an incomplete registration until the EGS corrects the deficiencies and the EGS delivers the registration to the Company.

3.3 CREDIT CHECK A registration for Coordination Services shall constitute authorization to the Company to conduct a background credit check on the EGS.

3.4 PROCESSING OF REGISTRATIONS The Company shall complete the processing of each registration for Coordination Services within ten (10) business days after the date of service of the registration, as determined under 52 Pa. Code § 1.56. The Company shall approve all completed registrations unless grounds for rejecting the registration, as defined below, exist.

3.5 GROUNDS FOR REJECTING REGISTRATION The Company may reject any registration for Coordination Services on any of the following grounds:

- A. The EGS has undisputed outstanding debts to the Company arising from its previous receipt of Coordination Services from the Company under this tariff;
- B. The EGS has failed to comply with credit requirements specified in Rule No. 12 of this tariff;
- C. The EDC has provided written notice to the EGS that a registration is deficient, pursuant to 52 Pa. Code § 1.56, and the EGS has failed to submit a completed registration within thirty (30) calendar days after the date of service of the registration.

The Company may also petition the Pennsylvania Public Utility Commission to reject the registration of an EGS with bad credit. The Company need not provide Coordination Services to the EGS pending the Pennsylvania Public Utility Commission's review of said petition unless the EGS has provided security to the Company as provided for in Rule No. 12.4.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

3. COMMENCEMENT OF EDC/EGS COORDINATION - (Continued)

3.6 OFFER OF CONDITIONAL ACCEPTANCE OF REGISTRATION Where grounds for rejection of a registration exist due to an EGS's outstanding and undisputed debts to the Company arising from its previous receipt of Coordination Services from the Company under this tariff, the Company may offer the affected EGS a conditional acceptance if the EGS pays such debts before it receives Coordination Services. If the EGS rejects the Company's offer of conditional acceptance under this Rule, then its registration for Coordination Services will be deemed rejected.

3.7 REJECTION OF REGISTRATION Upon rejection of any registration, the Company shall provide the affected EGS with written notice of rejection within the time periods set forth in Section 3.4, and shall state the basis for its rejection.

3.8 APPROVAL OF REGISTRATION Upon its approval of a registration for Coordination Services, or pursuant to an Order of the Commission approving a registration, the Company shall execute the Individual Coordination Agreement tendered by the registrant, and shall provide one to the EGS by delivering such within the period set forth in Section 3.4 and shall maintain a copy for its own records.

3.9 IDENTIFICATION NUMBERS Upon its approval of a registration for Coordination Services, the Company will use the Dun & Bradstreet number assigned to each EGS to be used in subsequent electronic information exchange between the EGS and the Company. In addition, the Company may also assign to the EGS identification numbers that may be required by PJM in connection with the submission and/or confirmation of load schedules for serving load in the Company's service territory.

(C)

3.10 COMMENCEMENT OF COORDINATION SERVICES Coordination Services shall commence within fifteen (15) days after the Company's acceptance of an EGS's registration for Coordination Services provided that all of the information necessary for the Company to provide Coordination Services has been provided to the Company and any conditions required under Rule No. 3.6 have been satisfied by the EGS.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

4. COORDINATION OBLIGATIONS - (Continued)

4.10 SUPPLY OF DATA An EGS and the Company shall supply to the other all data, materials or other information specified in this tariff, or otherwise reasonably required by the EGS or Company in connection with the provision of Coordination Services, in a thorough and timely manner.

4.11 COMMUNICATION REQUIREMENTS An EGS shall implement a VAN and a single Internet file transfer protocol, as determined by the EDEWG and Pennsylvania Public Utility Commission Docket No. M-00960890.F0015. Both data transfer methods must meet the minimum criteria of, and be endorsed by, the EDEWG.

4.11.1 CUSTOMER CHOICE INTERNET ACCESS An EGS shall have appropriate software for access to the Customer Choice Internet Site and file uploads and downloads.

4.11.2 ELECTRONIC MAIL An EGS shall have appropriate software to communicate regularly by electronic mail (e-mail), including the capability to receive ASCII file attachments. (C)

4.12 PAYMENT OBLIGATION The Company's provision of Coordination Services to an EGS is contingent upon the EGS's payment of all charges provided for in this EGS Tariff. (C)

4.13 RECORD RETENTION An EGS and the Company shall comply with all applicable laws and Pennsylvania Public Utility Commission rules and regulations for record retention, including but not limited to those Rules of Chapter 56 of the Pennsylvania Public Utility Commission's regulations.

4.14 DATA EXCHANGE

- A. Subject to Rule 4.14(B), below, the Company shall make available to an EGS, on a daily basis, customer, billing and financial transaction information regarding that EGS's customers in electronic files available via electronic exchange. These files will be consistent with standards developed by the EDEWG.
- B. An EGS must notify its customers that by signing up for Competitive Energy Supply with the EGS, the customer is consenting to the disclosure by the Company to the EGS of certain basic information about the customer, as listed in Rule 4.14(A). At minimum, the notice shall inform the customer that the following information will be disclosed: the customer's name, address, Duquesne Light Company account number and rate class.
- C. The Company will maintain on the Customer Choice Internet Site copies of the standard file formats it will provide to EGSs containing the data listed in this Rule of this tariff. The Company will not change the file formats without first providing at least seven days notice of any such change via electronic exchange and posting on the Customer Choice Internet Site. The Company will make a good faith effort to provide a greater period of notice when warranted.
- D. Nothing in this Rule 4.14 shall prohibit the Company from making available to EGSs other electronic data, in formats chosen by the Company consistent with the recommendations of the EDEWG. The Company will not change the file formats of the electronic data made available under this Rule 4.14(D) without first providing at least seven days notice of such change via electronic exchange and posting on the Customer Choice Internet Site. The Company will make a good faith effort to provide a greater period of notice when warranted.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES

5.0 GENERALLY The procedures for the selection of customers' EGS selection, switching among EGSs and other direct access procedures for obtaining Competitive Energy Supply shall occur in accordance with the direct access procedures set forth in the Enrollment Procedures Applicable to EDCs and EGSs, Docket No. M-00960890F.0014, Standards for Electronic Data Transfer and Exchange Between EDCs and EGSs, Docket No. M-00960890F.0015, Standards for Changing a Customer's Electric Supplier, Docket No. L-00970121 and the Commission's *Rulemaking to Amend the Provisions of 52 Pa. Code, Chapter 57 Regulations Regarding Standards for Changing a Customer's Electricity Generation Supplier*, Docket No. L-2014-2409383, and applicable Commission regulations, as set forth in this tariff.

5.1 DATA REQUIREMENTS

5.1.1 ENROLLMENT EGSs are encouraged to permit customers to enroll by telephone or by e-mail, but must send customer enrollments to the Company via properly formatted electronic files (customer name, customer address, Duquesne Light supplier agreement identification number, and authorization to release telephone number and authorization to release historical usage information) via EDI. EGSs shall forward the electronic files on a daily basis to the Company. The Company will acknowledge receipt of the enrollment file via electronic confirmation. The Company shall provide confirmation within one (1) business day of all electronic files received. Such confirmation shall include appropriate control totals such as number of records received, and the reason for any rejections (e.g., invalid supplier agreement identification number). Such confirmation shall also include information an EGS can use to identify rejected records.

5.1.2 A. ELIGIBLE CUSTOMER LIST In addition to the EDEWG Standard Eligibility List, the Company agrees to provide to EGSs, for all customers who have authorized the release of their information, the most recent available twelve (12) individual months of historical monthly electric usage and billed demand and Network Transmission Service Peak Load Contribution and Peak Load Contribution, per customer account. This information will be provided on the Company's web site in a downloadable format compatible for use with spreadsheet and database applications and will be updated monthly.

B. Methodology for Calculating Peak Load Contributions Used in Determination of Capacity Obligations and Network Transmission Service Peak Load Contributions Beginning January 1, 2005, until instructed otherwise by PJM, the Company will calculate the Peak Load Contributions and the Network Transmission Service Peak Load Contribution as follows:

1) Network Transmission Service Peak Load Contribution (1 CP)

To determine the customer's share of the Network Transmission Service Peak Load, the Company will first calculate the customer's transmission peak load contribution. The transmission peak load contribution is based on the customer's load coincident with Duquesne's transmission system zonal load during the one peak hour of the previous year. For customers that lack sufficient historical load data (e.g., new customers), the Company shall determine the customer's load for purposes of calculating its Network Transmission Service Peak Load Contribution. Second, the customer's load, adjusted for the Company's transmission and distribution line losses and the customer's share of unaccounted for energy (as provided by Rule No. 8 of this tariff), will be the customer's Network Transmission Service Peak Load Contribution.

(C)

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.1 DATA REQUIREMENTS - (Continued)

5.1.2 B. Methodology for Calculating Peak Load Contributions Used in Determination of Capacity Obligations and Network Transmission Service Peak Load Contributions – (Continued)

2) Peak Load Contribution (5 CP)

The Company's capacity obligation will be calculated by PJM based on the Company's peak load contribution and will be the basis for the capacity obligation for the following calendar year.

In determining the customer's share of the capacity obligation, the Company will first calculate the customer's peak load contribution. The peak load contribution is based on the customer's load coincident with PJM's system load during the peak hour of the five peak days for the appropriate PJM Region as provided for in the PJM Manuals/Tariffs. For customers that lack sufficient historical load data (e.g., new customers), the Company shall determine the customer's load for purposes of calculating its Peak Load Contribution. The customer's load in each of these five (5) hours, adjusted for the Company's transmission and distribution line losses and the customer's share of unaccounted for energy in the applicable hours (as provided by Rule No. 8 of this Tariff), will be averaged and the customer's percentage (%) share of the average DLCO system load will then be calculated. The PJM approved forecasted peak for the year will then be multiplied by the customer's percentage (%) share of the average DLCO system load to derive the customer's peak load contribution. When appropriate, zonal loads and customer peak load obligations will be adjusted to account for Demand Response and significant loss of load events.

(C)

This information will be sent to PJM who will calculate each EGS's capacity obligation.

5.1.3 Data Exchange

- A. The list of enrolled customers that the Company provides to all EGSs pursuant to Rule No. 5.1.2 A shall contain information about customers that have consented to the release of customer information in a format to be consistent with that determined by the EDEWG.
- B. The list of enrolled customers that the Company provides to all EGSs pursuant to Rule No. 5.1.2 A shall contain the following information about customers that have not consented to the release of customer information in a format to be consistent with that determined by the EDEWG:
 - (i) Duquesne Light Company supplier agreement identification number,
 - (ii) Rate class,
 - (iii) Customer's name, and
 - (iv) Customer's service address.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY Rule No. 5.2 delineates the process of customer selection for Competitive Energy Supply or Default Service.

5.2.1 An EGS must notify its customers that by signing up for Competitive Energy Supply with the EGS, the customer is consenting to the disclosure by the Company to the EGS of certain basic information about the customer, as listed in Rule No. 4.14 (a). At minimum, the notice shall inform the customer that the following information will be disclosed: the customer's name, address, Duquesne Light Company supplier agreement identification number, Duquesne Light meter number, and rate class.

(C)

5.2.2 If an enrolled customer or person authorized to act on the customer's behalf contacts the Company to inform the Company that it wishes to obtain Competitive Energy Supply from a particular EGS, the Company will inform the customer of the need to contact the EGS to select the EGS as supplier. The EGS will verify its desire to serve the customer and follow the process outlined in Rule No. 5.2.1.

5.2.3 The EGS will obtain appropriate authorization from the customer, or from the person authorized to act on the customer's behalf, indicating the customer's choice of EGS. The authorization shall include the customer's acknowledgment that the customer has received the notice required by Rule No. 5.2.1. It is the EGS's responsibility to maintain records of the customer's authorization in the event of a dispute, in order to provide documented evidence of authorization to the Company or the Commission. The EGS shall provide such authorization upon request by the Company.

(C)

5.2.4 The EGS shall provide an electronic file to the Company via electronic exchange file format designated by the Company that complies with the Commission's electronic requirements. The required electronic files shall include, at a minimum, EGS ID, Duquesne Light Company supplier agreement identification number, rate code, billing option, price plan (if single bill option is selected), transaction date and transaction time. Upon receipt of the electronic file from the EGS, the Company will automatically confirm receipt of the file via electronic exchange. Within one (1) business day of receipt of the electronic file, the Company will validate the records contained in the file, and will provide an electronic validation, including the number of records received and the reason for any rejections. Such validation shall include appropriate control totals such as number of records received, and the reason for any rejections (e.g., invalid supplier agreement identification number). Such validation shall also include information an EGS can use to identify rejected records.

5.2.5 On a pending switch to an EGS, the Company will send the customer a confirmation letter within one (1) business day notifying the customer of the pending switch. The selection will be effective three (3) business days after receipt of the request and billing with the selected EGS will begin on the fourth business day. The subsequent EGS will become the EGS of record for delivery further provided that: (1.) all customer information provided to the Company is accurate and complete and (2.) the customer has not contacted the Company to dispute the EGS. In such circumstances, the Company will send the new EGS an electronic file, via electronic exchange, containing information for the new customers of record for that particular EGS, in accordance with Rule 4.14(a). The Company will process any EDI transactions for a switch from an EGS and will assume any rescission period with the EGS has ended.

(C)

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY - (Continued)

5.2.5 - (Continued)

If, during the pending switch request, the customer elects to reject its new EGS selection, the customer will notify the rejected EGS and the EGS shall notify the Company. Upon notice from the EGS, the Company will process a drop for that EGS. In the event the customer rejects its EGS selection after the three day (3) day switching period, the customer will be referred to the EGS per Rule No. 5.2.6.

Once the switch request is received, the Company will notify the customer's prior EGS, via electronic exchange, of the discontinuance of service to the customer from that prior EGS.

5.2.6 If a customer contacts the Company to request a change of EGS, the Company will direct the customer to contact that EGS and will provide the telephone number of the EGS to the customer, if requested.

(C)

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY

5.2.7 In accordance with the Secretarial Letter issued August 20, 2010, at Docket No. M-2009-2082042, when requested by an EGS, the Company will provide confidential customer-specific information about a customer with whom the EGS is discussing the possibility of providing Competitive Energy Supply without receiving written authorization from the customer or from the EGS. It is the EGS's responsibility to convey to the customer via its authorization process that the Company will release the confidential customer-specific information only to the EGS to whom authorization was given and that the EGS will not release the information to others, unless the EGS is a licensed broker who is obtaining the confidential customer-specific information for purposes of sharing it with other licensed EGSs and makes that intent clear in communications with the customer. It is the EGS's responsibility to retain the records of the requisite authorization for a minimum of two (2) years to produce for a Commission or Company audit. If an EGS fails an audit conducted either by the Commission or the Company, the Company is then permitted to require that EGS to provide signed documentation indicating that a customer has authorized the release of customer-specific information before it may have access to the restricted customer data.

5.2.8 Subject to Rule No. 14.4 and Rule No. 14.5, if a customer contacts the Company to request a change from an EGS to default service under the EDC Retail Tariff, the Company will process the request as follows. The Company will send the customer a confirmation letter within one (1) business day after the customer contacts the Company. The Company will process the selection within three (3) business days of receipt of the request and billing with the Company for default service will begin on the fourth business day. If the customer does not contact the Company to rescind the switch during the pending switch, then the Company will process the request. Once the switch request is received, the Company will notify the customer's prior EGS, via electronic exchange, of the discontinuance of service to the customer from that prior EGS. When an EGS discontinues a customer's service and no other EGS has contracted with the customer to provide such service, then that customer will be provided with Default Service.

(C)
(C)
(C)

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY – (Continued)

5.2.9 Shopping customers may retain their current EGS when moving from one location to a new location within the Company's service territory subject to meeting the eligibility requirements and conditions set forth in Rule No. 45.3 of the Company's retail tariff. Eligible customers include all residential customers as well as commercial and industrial customers that use less than 300 kW of demand as defined in the retail Tariff.

The EDC shall notify the EGS via an electronic data interchange (EDI) 814 Move transaction to move the customer's service from the current location to the new location. (C)

The EGS must submit a drop request via EDI if it does not wish to continue service to the customer at the new service location. The EGS will maintain supply service to this customer until a three-business day switch can occur at the new address. (C)

An EDI transaction will also be sent for other reasons related to the transaction. Customers requesting to change the start date of their new service would require an EDI 814 Change request to be sent to the existing EGS detailing the new start date, and an EDI 814 Drop request would be sent if the customer decided to cancel the new move.

In the move transaction, the Company will send the EGS information that is similar to what is currently provided in a reinstate-request transaction, including the customer name, service address and rate class. The Company will also provide the EGS with: (i) the current supply agreement identification number; (ii) the new supply agreement identification number; and (iii) the service start date. Once the move transaction has been sent to the EGS, the EGS will serve the new account as of the service start date.

If a shopping customer contacts the Company to discontinue electric service at the customer's then-current location, and initiates a request for service at a new location in the Company's service territory and wishes to return to default service, the Company will notify the current EGS, via electronic exchange, of the customer's discontinuance of service for the account at the customer's then-current location. Final bill(s) will be issued to the date of discontinuance of service. (C)

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY – (Continued)

5.2.10 Customers starting new service with the Company will be permitted to begin supply service with an EGS on their start date subject to meeting the eligibility requirements in Rule No. 45.4 of the retail tariff.

The Company will accept inbound enrollment requests on accounts that are not yet active. However, the EGS is still responsible for submitting the enrollment request. The final component of this transaction will be to establish an estimated start date. The Company will establish the estimated start date for new service in its communication via the enrollment response sent back to the EGS.

The EGS must submit a drop request via EDI if it does not wish to supply service to the customer. However, the supplier must maintain supply service to this customer until a three-business day switch can occur under the Company's switching rules.

5.3 PROVISIONS FOR CONTRACTING WITH AN EGS TO PROVIDE TOU SERVICE

5.3.1 The Company may contract with an EGS to provide Time-of-Use ("TOU") service, with on-peak and off-peak rates in effect from June through September. The contracted EGS must submit an EDI transaction to enroll customers in the TOU program. Standard switching rules shall apply to customers enrolled in the TOU service program.

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(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.4 PROVISIONS RELATING TO AN EGS'S CUSTOMERS

5.4.1 ARRANGEMENTS WITH EGS CUSTOMERS EGSs shall be solely responsible for having appropriate contractual or other arrangements with their customers necessary to implement direct access consistent with all applicable laws, Pennsylvania Public Utility Commission requirements, and this tariff. The Company shall not be responsible for monitoring, reviewing or enforcing such contracts or arrangements.

5.4.2 TRANSFER OF COST OBLIGATIONS BETWEEN EGSS AND CUSTOMERS Nothing in this tariff is intended to prevent an EGS and a customer from agreeing to reallocate between them any charges that this tariff imposes on the EGS, provided that any such agreement shall not change in any way the EGS's obligation to pay such charges to the Company, and that any such agreement shall not confer upon the Company any right to seek recourse directly from the EGS's customer for any charges owed to the Company by the EGS.

5.4.3 CUSTOMER OBLIGATIONS Customers of an EGS remain bound by the rules and requirements of the applicable EDC Tariff under which they receive service from the Company.

5.4.4 If the Company elects to change the supplier agreement identification number for a customer receiving generation service from an EGS, the Company will notify the EGS of the change in supplier agreement identification number at the same customer location, via electronic exchange.

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RULES AND REGULATIONS - (Continued)

6. LOAD FORECASTING

6.1 CUSTOMER LOAD FORECASTING The EGS is responsible for forecasting its Customer Load Obligations. The Company will provide a forecast respective to each LSE as support information. The company forecasts will be provided in accordance with the following load forecasting procedures.

6.2 FORECASTING METHODOLOGY Most EDC customers utilize monthly (or daily) metering equipment. However, any EDC customer may choose to have the EDC install equipment or otherwise provide for (at the customer's expense at Pennsylvania Public Utility Commission approved rates) interval (hourly or sub-hourly) metering. The forecasting methodology for customers utilizing hourly metering data is slightly different than the methodology for customers utilizing monthly or daily metering equipment.

6.2.1 FORECASTS FOR MONTHLY OR DAILY METERED AND UNMETERED – (SUCH AS STREETLIGHTS) CUSTOMERS For each EGS, the EDC will provide hourly load forecasts for the aggregate of customers who have chosen the EGS. The EDC has developed and will maintain, based on load survey data, historical load profiles corresponding to the EDC's current rate classes identified in the EDC Tariff. These base profiles will be adjusted for day type (e.g., weekday, weekend, or holiday) and temperature. The EDC will use these rate class load profiles, adjusted for differences between the historical load profile day and the forecast day. The adjusted profiles will be applied to the summation by rate class of the EGS's customer's historical consumption to arrive at the aggregate hourly load forecasts.

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6.2.2 FORECASTS FOR CUSTOMERS UTILIZING HOURLY OR SUB-HOURLY METERING DATA The EDC will provide hourly load forecasts for each EGS customer that has elected to utilize hourly metering data. The EDC will use each customer's same day hourly loads from a previous week and adjust those hourly loads by the temperature factor for that EGS customer's rate class to determine that customer's hourly load forecast. The summation of these forecasts will establish the hourly supply obligation schedule of the EGS for serving these customers.

6.2.3 HISTORICAL LOAD PROFILE DATA The EDC will make available to EGSs the aggregated historical load profiles (including historical temperature data) and any related data which the EDC uses to calculate the hourly forecasts. This information will be available for download from the Customer Choice Internet Site.

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6.2.3.1 UPDATES TO HISTORICAL LOAD PROFILE DATA The EDC shall review from time to time its historical load profile data by rate class and any related data and shall update the data as appropriate.

6.3 ADJUSTMENT FOR LOSSES The forecast/supply obligation will be adjusted to cover transmission and distribution losses.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

6. LOAD FORECASTING - (Continued)

6.4 FORECASTING PROCESS

6.4.1 DAILY FORECASTS The EDC shall prepare a forecast for each day:

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- (1) A Final hourly Forecast for the next day, which will be used to establish the EDC operational forecast
- (2) A Final Forecast for the next day that is calculated for a temperature that is three (3) degrees Fahrenheit above the temperature used in the Final hourly Forecast.
- (3) A Final Forecast for the next day that is calculated for a temperature that is three (3) degrees Fahrenheit below the temperature used in the Final hourly Forecast.

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6.4.2 PROCEDURE FOR FORECASTING The following procedure will be followed each day to determine the Final Forecast.

6.4.2.1 BUSINESS DAYS AND SCHEDULING WINDOW The daily forecasting process shall be performed on each business day. A business day is a weekday excepting PJM holidays. The daily forecasting process shall be performed on each business day for a scheduling window consisting of all following days through the next business day.

For example, the daily forecasting process shall be performed Monday through Thursday (except holidays) for a scheduling window that covers the following day (midnight to midnight). If the following day is a holiday, then the scheduling window shall include the holiday and be extended to include the first business day following the holiday. Similarly, the daily forecasting process shall be performed on Friday for a scheduling window consisting of the following Saturday, Sunday, and Monday. If the Monday is a holiday, then the scheduling window shall include the holiday and extend through the first business day following the holiday.

In addition to the forecasts required of EGSs hereunder, the EGS may provide advance-hourly forecasts for each of its Customers with Hourly or Sub-Hourly Metering Equipment. Forecasts are not final until the business day before those forecasts are to apply.

Step 1 EDC Determines Hourly Load Forecast By EGS By Rate Class

(A) For Monthly or Daily Metered and Unmetered Customers:

For each rate class, sum each EGS's customer's loads for that rate class, apply the appropriate rate class load profile for the day, and adjust the hourly loads by the temperature factor for the rate class.

Load forecasts will be adjusted for losses as appropriate.

For each EGS, combine all of the rate class hourly load forecasts into a total hourly load forecast.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

7. DAY AFTER LOAD ESTIMATES AND SUPPLY SCHEDULES

7.1 TOTAL DAY AFTER LOAD ESTIMATES The total load estimate for an EGS is expected to be equal to the aggregate hourly load estimates for all of the monthly, hourly, and sub-hourly metered and unmetered customers' usage plus load estimates for any Coordinated Suppliers that have designated that EGS as their Scheduling Coordinator. Load estimates, including distribution losses, transmission losses, and UFE are utilized for the day after InSchedules.

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7.2 DAILY LOAD SCHEDULING PROCESS (DAY AFTER LOAD OBLIGATIONS)

7.2.1 UPLOADING SCHEDULES The Company will submit load estimates into InSchedules in the form of RLR (or WLR contracts) with view only privileges for the EGS (or municipalities or wholesale suppliers, as appropriate). The RLR (or WLR) contracts submitted by the Company in InSchedules will be auto-confirmed by the EGS (or municipalities or wholesale suppliers, as appropriate). The Company will upload the load estimates on each business day using the PJM InSchedules System according to PJM requirements. In accordance with the PJM InSchedules manual (m09), the PJM InSchedules application will accept scheduling and delivery of energy for up to three decimal places or one-thousandth (0.001) MWh. The schedule uploaded by the Company shall be binding on that EGS. The Company will provide these same load estimates on the Website by 10:00 AM Eastern Prevailing Time to assist the EGS.

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7.2.2 LOAD SCHEDULE CHANGES If the EGS has a dispute, they may notify the Company by telephone. The Company will make reasonable efforts to review and, if the reason for the changes are determined by the Company to be operationally valid, confirm the load schedule changes using the PJM InSchedules System, prior to the PJM designated deadline. In the absence of confirmation by the Company, the prior supply schedule value will remain in effect. In light of deadlines imposed by the PJM OI for the submission of load schedule changes, an EGS should initiate any necessary changes and notify the Company well before the cut-off time to increase the likelihood that the changes will be accepted.

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7.2.3 SUPPLY SCHEDULES The EGS is responsible for supplying generation to meet its load estimates uploaded by the Company in accordance with Rule No. 7.2.1.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

8. RECONCILIATION

8.1 GENERAL DESCRIPTION Reconciliation service accounts for mismatches between an EGS's load estimate as determined in Rule No. 7 for serving its Customers and the energy that was actually used by those Customers. This service differs from Energy Imbalance Service – a related service performed exclusively by the PJM OI under the PJM Tariff – because the latter accounts for differences between an EGS's actual load and the quantity of energy actually delivered by the EGS. Because of the absence of universal real-time metering, the calculation of reconciliation quantities typically must occur after the monthly reading of Customer's meters. (C)

8.1.1 THE COMPANY'S ROLE The Company will assist PJM in accounting for Reconciliation quantities by (1) collecting all Customer usage data; (2) determining hourly reconciliation quantities for each EGS or Scheduling Coordinator; (3) calculating monthly reconciliation quantities for each EGS or Scheduling Coordinator; and (4) submitting the reconciliation quantities to the PJM OI.

8.2 METER DATA COLLECTION Meter data collected by the Company shall be utilized to calculate the quantity of energy actually consumed by an EGS's customers for a particular reconciliation period.

8.2.1 MONTHLY OR DAILY METERED AND UNMETERED CUSTOMERS The EDC collects daily customer reads for the majority of its customer base. The rate class profile is used to convert the actual daily consumption to equivalent hourly consumption.

If a customer does not have daily reads available, the EDC collects monthly meter data, in subsets corresponding to customer billing cycles, which close on different days of the month. The EDC converts customer's actual monthly consumption to equivalent hourly consumption using the rate class load profiles.

8.2.2 CUSTOMERS UTILIZING HOURLY OR SUB-HOURLY METERING DATA Data from customers utilizing hourly or sub-hourly metering data is collected by the EDC on a daily or monthly basis.

8.3 HOURLY CONSUMPTION Hourly consumption for the customers of each EGS is determined by summing the consumption as described in Rules No. 8.2.1 and 8.2.2.

8.4 CONSUMPTION AND LOSSES Transmission and distribution losses are calculated based upon customer consumption consistent with Rule No. 8.4.1. These losses are added to the hourly energy consumed by customers and are included in the Consumption calculation.

8.4.1 CONSUMPTION CALCULATION The Company will calculate default service load in the same manner in which EGS load is calculated. After meters are read, load profiles will be applied to all customers, including those on default service. When interval meter reading data for a specific customer is available for use, the Company shall use this information in determining load obligation.

8.4.2 UNACCOUNTED FOR ENERGY To determine the proper allocation of losses, average losses by class will be applied to both EGS and default service loads, and unaccounted for energy) will be allocated pro rata among all suppliers, including the default service suppliers.

8.5 BILLING The Company and the EGS will rely on PJM to perform calculations to determine the monetary value of reconciliation quantities and to bill and/or credit EGSs and the Company for oversupplies and undersupplies at an hourly price through the PJM grid accounting system. PJM Miscellaneous Charges will be allocated pro rata among all suppliers, including the default service suppliers.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

11. CONFIDENTIALITY OF INFORMATION

11 GENERALLY All confidential or proprietary Company information made available by the Company to an EGS in connection with the provision of Coordination Services, including but not limited to load data, and information regarding the business processes of the Company and the computer and communication systems owned or leased by the Company, shall be used only for purposes of receiving Coordination Services and/or providing Competitive Generation Service to Customers in the Company's service territory. Other than disclosures to EGS representatives for the purpose of enabling an EGS to fulfill its obligations under the EGS Tariff or provide Competitive Generation Service to Customers in the Company's service territory, an EGS may not disclose confidential or proprietary Company information without the Company's prior authorization or consent.

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11.1 CUSTOMER INFORMATION The EGS shall keep all customer-specific information supplied by the Company confidential unless the EGS has the customer's authorization to do otherwise.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING

12.1 CUSTOMER BILLING BY THE COMPANY All EGS charges to customers, if billed by the Company, shall be billed in accordance with the EDC Tariff and the following provisions:

12.1.1 COMPANY BILLING FOR EGS The Company will bill price plans offered by the EGS which are based on fixed and variable charges similar to those the Company employs for billing distribution service and default service. Nothing in this rule shall require the Company to manually bill customers. Within this context, if the Company's billing system has the capability to bill the price plans offered by the EGS, the EGS may request the Company to do all or some of the billing for the EGS's customers based on the customers' preferences. In addition, the Company will include on its bill EGS late fees and payment arrangements as required by the Pennsylvania Public Utility Commission. However in no case shall the Company require the EGS to provide separate customer lists or perform unique scheduling and reconciliation services for customers billed directly by the Company.

12.1.2 BILLING FILES Where the EGS has requested the Company to act as the EGS's billing agent, the Company shall electronically transmit files of billing detail daily to the EGS. Such files shall include the Company supplier agreement identification number, rate codes, usage information, demand and energy charges, sales tax, and other EGS charges. Billing files transmitted shall have control totals to assure all data was received by the EGS. Control totals include the number of records on the file and significant totals (e.g. total kWh billed, total amount billed, total tax). All billing files will be in a format consistent with standards developed by the EDEWG.

12.1.3 BUDGET BILLING The Company will develop dual tracking systems to administer budget billing and apply payments for EGS charges and Company charges for rate ready billing only.

12.1.4 EGS TAX RESPONSIBILITY The Company is not responsible for paying or remitting on behalf of an EGS taxes including, but not limited to, Pennsylvania Gross Receipts Tax, Pennsylvania Public Utility Realty Tax, Pennsylvania Capital Stock Tax and Pennsylvania Corporate Net Income Tax.

12.1.4.1 SALES TAX EXEMPTION With respect to customers receiving one bill from the Company, the EGS for whom the Company is billing must provide to the Company the applicable sales tax exemption percentage for each customer. The Company will use the sales tax exemption percentage provided by the EGS for billing the EGS's charges. The EGS is responsible for holding appropriate exemption certificates and is liable for the collection and remittance of sales tax on the EGS's charges. The Company will use a zero exemption percentage if no percentage is provided by an EGS.

12.1.5 COMPANY REIMBURSEMENT TO EGS FOR CUSTOMER PAYMENTS For EGSs electing consolidated billing and serving residential and small and medium C&I customers, defined as those eligible for Rider No. 8 – Default Service Supply of the Company's Retail Tariff, the Company shall forward payment in accordance with the provisions of Rule No. 12.1.7 below. For receivables associated with EGS sales to all other customers, the Company shall reimburse the EGS within 14 days of receipt of payment for all energy charges, late fees, sales taxes, and any other taxes and charges collected on behalf of the EGS from the customer consistent with Section 2807 (c) (3) of the Competition Act. For eligible Day-Ahead Hourly Price Service customers defined in Rule No. 5.2.8 that have an off-cycle switch, the Company will allocate any customer underpayment with respect to supply charges attributable to multiple Electricity Providers based on the percentage owed to each.

12.1.6 EGS BILLING DATA The EGS shall provide all necessary data in its possession for the timely computation of bills. A failure of the EGS to provide necessary data to the Company in a timely fashion may delay generation of a bill for the month to which the data pertains. In such instances, the EGS is responsible for all fines and violations, if any, arising as a consequence of the Company's inability to render a timely bill.

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RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM Duquesne will purchase the accounts receivable, without recourse, associated with EGS sales of retail electric commodity, composed of generation and transmission services, to residential customers and commercial and industrial ("C&I") customers with monthly metered demand less than 300 kW within Duquesne's service territory. Eligible customers are those customers taking delivery service under the Company's retail tariff Rate RS, RH, RA, GS/GM and GMH, and who purchase their electric commodity requirements from the EGS through consolidated billing with the Company. Commercial and industrial customers will be separated into two categories for purposes of the Purchase Price Discount discussed in Section 12.1.7.2. Small C&I customers will be those customers with monthly metered demand less than 25 kW and Medium C&I customers will be those customers with monthly metered demand equal to or greater than 25 kW. The classification of customers as less than or equal to or greater than 25 kW is discussed in detail in the Company's retail tariff Rate GS/GM and Rate GMH. Under the POR program, Duquesne will reimburse EGSs for their customer billings regardless of whether Duquesne receives payment from the customer, subject to the limitations set forth below. Duquesne will seek to recover the EGS receivables from EGS customers consistent with Duquesne's existing collection procedures for recovery of billings to default service customers, and incur any uncollectible costs related to billings for EGSs. The term of the POR program defined herein will become effective June 1, 2021, and will remain in effect as described and will terminate on May 31, 2025.

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12.1.7.1 ELIGIBILITY REQUIREMENTS EGSs that choose Duquesne's consolidated billing option for all or a portion of their eligible customer accounts will be required to sell their accounts receivable to Duquesne for those customers for whom Duquesne issues a consolidated bill. (EGSs may continue to issue their own bills through Dual Billing for commodity service, for all or a portion of their customers, but will not be eligible to participate in the POR program for those customers that receive Dual Billing.) EGSs may choose to participate in the POR program with consolidated billing at any time during the term of the POR program as long as the EGS does not remove customer accounts from consolidated billing. A customer whose service is terminated or who voluntarily switches from the EGS' service to another generation provider is not considered to have been removed by the EGS from consolidated billing and the POR program.

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EGSs participating in this POR program will agree not to reject for enrollment a new customer covered by the program based on credit-related issues. Any customer who wishes to be served by an EGS participating in the POR program will be accepted by the EGS if that EGS is actively serving the rate class to which that customer belongs.

12.1.7.2 PURCHASE PRICE DISCOUNT Participating EGSs' applicable electric commodity receivables will be purchased at a discount. The discount rate will be 0.10% for incremental, ongoing operating and administrative expenses associated with the POR Program related to these customers.

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RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM – (Continued)

12.1.7.2.2 PURCHASE PRICE DISCOUNT ADJUSTMENT FOR INDIVIDUAL EGS Duquesne will monitor individual EGS uncollectible percentage rates (measured as any unpaid amounts sixty (60) days or older divided by that EGS's total annual consolidated billings), to determine whether any individual EGS is engaging in a practice that results in an increase to the total uncollectible percentage rate for the Duquesne System. If, based on this monitoring, Duquesne finds that an individual EGS's uncollectible percentage rate exceeds 5%, then Duquesne, at its discretion, may increase the discount rate for that individual EGS's accounts to reflect the increased costs associated with the EGS's uncollectible accounts by the difference between the EGS's uncollectible percentage rate and two percent (2%). For purposes of this calculation, Duquesne shall rely on the most recent twelve (12) month period (or shorter if the EGS is new to the POR program) to calculate the EGS's uncollectible percentage rate. Duquesne, in its discretion, may opt to waive the imposition of the additional discount if the increase in the uncollectible rate results primarily from providing service to previously poor paying customers currently on default service and the individual EGS is able to provide a reasonable explanation for the significant increase in its uncollectible rate is not the result of a particular price offering, marketing strategy or other actions of the individual EGS. If, however, Duquesne determines that the EGS may challenge that determination pursuant to the dispute resolution procedures discussed below. Should the result of those procedures uphold the EGS's position, Duquesne will refund to the EGS the additional discount withheld from their receivables. In the course of the dispute resolution, the EGS may be called upon to provide customer payment history for the customers it serves, commodity pricing, and other such information deemed appropriate, subject to confidentiality agreement. The discount will be lowered to the level applicable to other EGSs when and if the particular EGS's uncollectible percentage rate decreases to a level of two percent (2%) or below over a twelve (12) month period. If the particular EGS stops providing service to a customer under the POR program, the EGS must pay to Duquesne an amount equal to the increase to the discount multiplied by that customer's prior year's billings, to the extent that such amount has not already been paid on the date the EGS stops providing service to that customer.

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12.1.7.3 TIMING OF PAYMENTS Payments to EGSs will occur electronically; thirty-five (35) days after consolidated bills are issued, and will continue throughout the billing cycle. If the thirty-fifth (35th) day falls on a weekend, Duquesne Light holiday or bank holiday, payments will occur on the next business day.

12.1.7.4 OTHER PAYMENT PROVISIONS If the EGS customer is on consolidated rate ready billing or consolidated rate ready billing and Duquesne's budget payment plan, Duquesne shall purchase the actual amount owed each month by the customer and payments to EGSs shall be made based on the actual amount owed. If the EGS customer is on consolidated bill ready billing, Duquesne shall purchase the amount sent in the bill ready 810 EDI transaction and payments to EGSs shall be made based on the amount in the bill ready 810. Duquesne shall also purchase accounts receivable of EGS's customers based upon an estimated bill. Duquesne shall add to or deduct from any payments due to EGSs amounts that may result from reconciliations, estimated readings, cancel and re-bills, or any applicable billing adjustment. Notwithstanding the foregoing, Duquesne shall only be obligated to purchase the monthly budget amount and remit to the EGS any adjusted budget billing amount until Duquesne implements any necessary changes to its billing system to allow for the payment of the actual amount owed by the customer.

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12.1.7.5 TRANSFER OF COLLECTION RESPONSIBILITIES AND RIGHTS Under the POR program, Duquesne is entitled to receive and retain all payments from customers. Duquesne is authorized to conduct collection activities and, if necessary, terminate its delivery service and EGS commodity service to customers whose accounts receivables were purchased and who fail to make payment of amounts due on the consolidated bill, including the amount of the purchased EGS receivables. Any such termination of service shall be in accordance with the

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM – (Continued)

12.1.7.5 TRANSFER OF COLLECTION RESPONSIBILITIES AND RIGHTS - (Continued)

service termination provisions contained herewith and consistent with the provisions of Chapter 14 of the Pennsylvania Public Utility Code and Chapter 56 (or a successor chapter) of the Commission's regulations. Duquesne shall be authorized to terminate commodity service to an EGS customer if the customer's payments do not cover the amount billed by the Company. A residential customer terminated from utility service under the POR program may be reconnected to service upon the payment of the arrears that were subject to the termination. The required payment may include both delivery and EGS commodity charges.

An EGS customer in the POR program that has been terminated for non-payment may be reconnected upon paying the sum of unpaid distribution charges (plus any applicable reconnection fees or deposits) and the amount billed for EGS commodity service or a payment arrangement at the Company's sole discretion or as required by applicable law. At the time of reconnection, the customer will be reconnected to the EGS or the default service provider of record.

12.1.7.6 DISPUTE RESOLUTION To the extent concerns arise regarding the implementation of the provisions of the POR program, parties shall attempt to resolve such disputes according to the informal, internal and/or external dispute resolution procedures described in this tariff at Rule No. 18 – Alternative Dispute Resolution. Parties shall also have the right to resolve such disagreements in the Commission's dispute resolution process.

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(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING - (Continued)

12.2 EGS PAYMENT OF OBLIGATIONS TO THE COMPANY An EGS shall pay all Coordination Services Charges or any other charge it incurs hereunder in accordance with the following provisions:

12.2.1 BILLING PROCEDURE Each month, the Company shall submit an invoice to the EGS for all Coordination Services Charges provided under this tariff. The invoice may be transmitted to the EGS by any reasonable method requested by the EGS. An EGS shall make payment for charges incurred on or before the due date shown on the bill. The due date shall be determined by the Company and shall not be less than fifteen (15) days from the date of transmittal of the bill.

12.2.2 BILLING CORRECTIONS AND ESTIMATED BILLINGS Notwithstanding anything stated herein: (1) bills shall be subject to adjustment for any errors in arithmetic, computation, meter readings, estimating or other errors for a period for four (4) years from the date of such original monthly billing and (2) the Company shall be entitled to submit estimated bills (subject to correction) in the event the EGS fails to supply necessary information in a timely fashion or other circumstances limit the timely availability of necessary data. (C)

12.2.3 MANNER OF PAYMENT The EGS may make payments of funds payable to the Company by wire transfer to a bank designated by the Company. The Company may require that an EGS that is not creditworthy tender payment by means of a certified or cashier's check, or by wire transfer, or other immediately available funds. If disputes arise regarding an EGS bill, the EGS must pay the undisputed portion of disputed bills under investigation. All payments shall be in United States dollars.

12.2.4 LATE FEE FOR UNPAID BALANCES If payment is made to the Company after the due date shown on the bill, a late fee will be added to the unpaid balance until the entire bill is paid. This late fee will be 1.5% per month on the unpaid balance.

12.2.5 EGS DEFAULT In the event the EGS fails to make payment to the Company on or before the due date as described above, and such failure of payment is not corrected within thirty (30) calendar days after the Company notifies the EGS to cure such failure, the EGS shall be deemed to be delinquent. In the event of a billing dispute between the Company and the EGS, the Company will continue to provide service pursuant to the Individual Coordination Agreement and the tariff as long as the EGS continues to make all payments not in dispute. A billing dispute shall be dealt with promptly in accordance with the dispute resolution procedures set forth below in Rule 18.

12.2.5.1 EGS OFFSET In the event an EGS is deemed to be delinquent under 12.2.5, the Company may, at its sole discretion, reduce the reimbursement to the EGS for amounts collected by the Company by the amount owed to the Company. (C)

12.3 BILLING FOR SUPPLIER OBLIGATIONS TO OTHER PARTIES The Company will assume no responsibility for billing between an EGS and any energy source, or a Scheduling Coordinator and any Coordinated Suppliers.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

13. WITHDRAWAL BY EGS FROM RETAIL SERVICE

13.1 NOTICE OF WITHDRAWAL TO THE COMPANY An EGS shall provide electronic notice to the Company of withdrawal by the EGS from retail service in accordance with the Pennsylvania Public Utility Commission's rulings in Docket No. 00960890F.0013, and any subsequent applicable Pennsylvania Public Utility Commission rulings.

13.2 NOTICE TO CUSTOMERS An EGS shall provide notice to its customers of withdrawal by the EGS from retail service in accordance with the Pennsylvania Public Utility Commission's rulings in Docket No. 00960890F.0013 and any subsequent applicable Pennsylvania Public Utility Commission rulings. The EGS shall provide a copy of the form of such notice to the Company.

13.3 COSTS FOR NONCOMPLIANCE An EGS that withdraws from retail service and fails to provide at least ninety (90) days written notice of said withdrawal shall reimburse the Company for any of the following costs associated with the withdrawal:

- A. Mailings by the Company to the EGS's customers to inform them of the withdrawal and their options;
- B. Non-standard/manual bill calculation and production performed by the Company;
- C. EGS data transfer responsibilities that must be performed by the Company; and
- D. Charges or penalties imposed on the Company by third parties resulting from EGS non-performance.

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(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

14. DISCONTINUANCE OF EGS SERVICE TO PARTICULAR CUSTOMERS

14.1 NOTICE OF DISCONTINUANCE TO THE COMPANY An EGS shall provide electronic notice to the Company of all intended discontinuances of service to customers in accordance with applicable Pennsylvania Public Utility Commission rules.

14.2 NOTICE TO CUSTOMERS An EGS shall provide a minimum of ninety (90) days advance notice to any customer it intends to stop serving of such intended discontinuance in a manner consistent with the Pennsylvania Public Utility Commission's rulings in Docket Nos. L-00970126 and M-00960890 and any subsequent applicable Pennsylvania Public Utility Commission rulings. The application of this Rule No. 14.2 will, however, be limited to the classes of customers to which the referenced Pennsylvania Public Utility Commission rulings will apply. With respect to all other classes of customers, it will be the EGS's responsibility to provide notice to a customer of its intention to discontinue service in accordance with the EGS's contractual obligations with the customer.

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14.4 CUSTOMERS RETURNING TO DEFAULT SERVICE An EGS shall give the customer and Duquesne at least (ninety) 90 days notice prior to the meter read date on which the EGS has a reasonable expectation that it will no longer be serving the customer, whether due to termination of a contract or pursuant to the terms of its contract. EGSs shall not utilize the flexibility afforded by these rules to propose price changes that are designed to economically force customers to return to default service during the Summer period. If an EGS has a reasonable expectation that it will no longer be serving a customer as of a meter read date, the EGS shall issue the notice required by the previous sentence within five (5) business days of determination, and such customers shall have a minimum of sixty (60) days in which to make the choices outlined in Section 45.2 of Duquesne's retail tariff, as appropriate. For Duquesne's purposes, this ninety (90) day notice to Duquesne is for informational and planning purposes only.

14.4.1 CUSTOMER MUST INITIATE THE SWITCH TO DEFAULT SERVICE The Company will accommodate requests by customers to switch EGSs in accordance with 52 Pa. Code Chapter 57, Subchapter M "Standards for Changing a Customer's Electricity Generation Supplier." Customers who elect to return to default service from an EGS will return at the charges of the applicable tariff rate schedule and a customer may return to default service in accordance with the switching protocols contained in the Retail Tariff by requesting the same from the Company. Switching by customers shall occur in accordance with the direct access procedures, and in accordance with the provisions contained in this tariff and the Company's retail tariff. No customer will be returned to default service for any reason without authorization by that customer, except as follows: the Company will permit a customer to return to default service in a switch initiated by the customer's EGS through standard EDI procedures in the following circumstances: (1) the complete abandonment of service in the Company's service territory by the customer's EGS;(2) to remedy a case of slamming of the customer; (3) the expiration of the term of the customer's contract with the EGS, provided that the customer's contract with the EGS is a standard one commonly used by the EGS to provide service to other customers with similar service requirements and the expiration dates of the contract are not otherwise designed to game supply around default service rates by returning the customer to default service when wholesale energy prices have increased and EGS service to the customer has become uneconomic; or (4) as required under the Company's shopping program, if any, for customers participating in the Company's Customer Assistance Program.

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RULES AND REGULATIONS - (Continued)

15. LIABILITY

15.1 GENERAL LIMITATION ON LIABILITY The Company shall have no duty or liability with respect to electric energy before it is delivered by an EGS to a point of delivery on the Company's distribution system. After its receipt of electric energy and capacity at the point of delivery, the Company shall have the same duty and liability for distribution service to customers receiving Competitive Energy Supply as to those receiving electric energy and capacity from the Company.

15.2 LIMITATION ON LIABILITY FOR SERVICE INTERRUPTIONS AND VARIATIONS The Company does not guarantee continuous, regular and uninterrupted supply of service. The Company may, without liability, interrupt or limit the supply of service for the purpose of making repairs, changes, or improvements in any part of its system for the general good of the service or the safety of the public or for the purpose of preventing or limiting any actual or threatened instability or disturbance of the system. The Company is also not liable for any damages due to accident, strike, storm, riot, fire, flood, legal process, state or municipal interference, or any other cause beyond the Company's control.

15.3 ADDITIONAL LIMITATIONS ON LIABILITY IN CONNECTION WITH DIRECT ACCESS Other than its duty to deliver electric energy and capacity, the Company shall have no duty or liability to an EGS providing Competitive Energy Supply arising out of or related to a contract or other relationship between an EGS and a customer of the EGS.

The Company shall implement customer selection of an EGS consistent with applicable rules of the Commission and shall have no liability to an EGS providing Competitive Energy Supply arising out of or related to switching EGSs, unless the Company is negligent in switching or failing to switch a customer.

15.4 TAX INDEMNIFICATION If Duquesne Light Company becomes liable under Section 2806(g) or 2809(c) of the Public Utility Code, 66 Pa. C.S. §§ 2806(g) and 2809(c), for Pennsylvania state taxes not paid by an EGS, the non-compliant EGS shall indemnify Duquesne for the amount of additional state tax liability imposed upon Duquesne by the Pennsylvania Department of Revenue due to the failure of the EGS to pay or remit to the Commonwealth the tax imposed on its gross receipts under Section 1101 of the Tax Report Code of 1971 or Chapter 28 as noted above.

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LOAD DATA SUPPLY CHARGE

AVAILABILITY/APPLICABILITY

The Company will fulfill a customer's or its authorized representative's request for customer load information available on its information system. The Company will provide customer load information, with customer consent, only to EGSs or other customer-authorized representatives, for up to five (5) requests for the same account in a calendar year at no charge after which subsequent requests will be charged according to the Table of Charges. The Company will provide customer load information on a 15 or 60-minute interval basis as specified by the customer, EGS or other customer-authorized representative.

TABLE OF CHARGES

An EGS or other customer-authorized representative must pay the charges stated below:

If the Company has already provided load data to a customer or its authorized representative five (5) times for the same account in a calendar year, the customer will be charged for subsequent requests in that year at \$60 per request.

CONDITIONS

No customer-specific information will be supplied to an EGS or other representative of the customer before the Company's receipt of a customer's written authorization to release such data to such EGS or other representative. EGSs who qualify as creditworthy as those terms are defined in this tariff will be billed for each request pursuant to the procedure identified in Rule No. 12.2.1 of this tariff. Payment by an EGS who does not qualify as creditworthy or has bad credit as those terms are defined in this tariff must be made before release of information.

METHOD OF PAYMENT

There are two (2) methods of payment:

A check made payable to Duquesne Light Company and sent to:

Duquesne Light Company
Attn: Supplier Service Center
411 Seventh Avenue
14th Floor, MD 14-1
Pittsburgh, PA 15219

or through a wire/ACH transfer per Company instructions.

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STANDARD OFFER PROGRAM COST RECOVERY

BACKGROUND

The Company's Standard Offer Program ("SOP") is implemented pursuant to Commission Order dated Xxxxxxxx XX, XXXX, at Docket No. P-2020-XXXXXXX. Under the SOP, EGSs can submit applications agreeing to become SOP Suppliers and provide a Standard Offer that is a fixed price product seven percent (7%) lower than Duquesne Light's Price to Compare ("PTC"), in effect at the time of the offer, for a twelve month (12-month) period.

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SUPPLIER CHARGES

As approved by the Commission in the proceeding at Docket No. P-2020-XXXXXXX, the Company will charge each SOP Supplier a Customer Acquisition Fee that will be applied to the number of EDI transactions submitted by the SOP Supplier to Duquesne Light.

(C)

CUSTOMER ACQUISITION FEE

The Customer Acquisition Fee for each EDI transaction submitted will be \$30.00.

(C)

BILLING AND PAYMENT

The Company will bill the participating SOP Suppliers on a monthly basis. All charges are due and payable within 30 days. There are two methods of payment:

A check made payable to Duquesne Light Company and mailed to:

Duquesne Light Company
Attn: Supplier Service Center
411 Seventh Avenue
14th Floor, MD 14-1
Pittsburgh, PA 15219

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(C)

or through a wire/ACH transfer per Company instructions.

(C)

(C)

If an SOP Supplier fails to make the required payment, Duquesne Light may reduce the amount due to that SOP Supplier from that SOP Supplier's next Purchase of Receivable ("POR") payment by the SOP amount due (but not from amounts that are subject to a bona fide POR payment dispute).

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TABLE 1
Real Power Distribution Losses

Rate Schedule	Percentage of Loss
AL - Architectural Lighting Service	6.1%
GL - General Service Large	2.9%
GLH - General Service Large Heating	2.9%
GMH - General Service Medium Heating	5.3%
GS/GM - General Service Small and Medium	5.3%
HVPS - High Voltage Power Service	0
L - Large Power Service	2.9%
RA - Residential Service Add On Heat Pump	6.1%
RH - Residential Service Heating	6.1%
RS - Residential Service	6.1%
SE - Street Lighting Energy	6.1%
SH - Street Lighting Highway	6.1%
SM - Street Light Municipal	6.1%
UMS - Unmetered Service	5.3%
PAL - Private Area Lighting	6.1%

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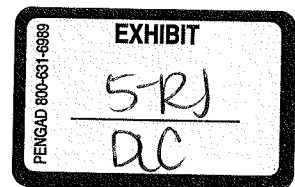
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DUQUESNE LIGHT STATEMENT NO. 5-RJ

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition Of Duquesne Light : **Docket No. P-2020-3019522**
Company For Approval Of :
Default Service Plan For The :
Period June 1, 2021 Through May :
31, 2025



**REJOINDER TESTIMONY OF
KATHERINE M. SCHOLL**

Dated: September 4, 2020

1 **Q. Please state your full name and business address.**

2 A. My name is Katherine Scholl. My business address is 411 Seventh Avenue, Mail
3 Drop 15-1, Pittsburgh PA 15219.

4

5 **Q. What is your position at Duquesne Light Company (“Duquesne Light” or
6 “Company”)?**

7 A. I am the Director of Customer Experience.

8

9 **Q. How long have you worked at Duquesne Light?**

10 A. I have been with Duquesne Light since May 2016.

11

12 **Q. Did you previously submit testimony in this proceeding on behalf of Duquesne
13 Light Company?**

14 A. Yes. I submitted direct testimony (Duquesne Light Statement No. 5) on April 20,
15 2020, rebuttal testimony (Duquesne Light Statement No. 5-R) on August 14, 2020,
16 and surrebuttal testimony (Duquesne Light Statement No. 5-SR) on August 28,
17 2020.

18

19 **Q. What is the purpose of your Rejoinder Testimony?**

20 A. My rejoinder testimony responds briefly to comments of other parties’ witnesses
21 on the following topics:

- 1 1. The Company's Standard Offer Program ("SOP");
- 2 2. The Company's procedures associated with transferring customers to
- 3 Allconnect; and
- 4 3. The Company's EGS billing procedures.

5

6 **Q. Are you sponsoring any Exhibits along with your Rejoinder Testimony?**

7 A. No.

8

9 **I. STANDARD OFFER PROGRAM**

10 **Q. In surrebuttal testimony, OCA witness Alexander and CAUSE-PA witness**
11 **Geller reiterate their recommendations that the Company conduct an**
12 **analysis of the supply rates SOP participants pay EGSs following the**
13 **conclusion of the 12-month SOP period.¹ Is the Company open to performing**
14 **such an analysis?**

15 A. Yes. Based on the comments of EGS Parties witness Kallaher in his rebuttal and
16 surrebuttal testimonies,² I understand that some parties may dispute the utility of
17 such a study. That said, if the Commission so directs, the Company will conduct
18 the analysis that Ms. Alexander and Mr. Geller recommend and provide results as
19 part of its next DSP filing or as otherwise directed by the Commission. As Ms.

¹ OCA Statement No. 2-S, p. 2, lines 14-16; CAUSE-PA Statement No. 1-SR, p. 3, line 19 – p. 4, line 8.

² E.g., EGS Parties Statement Nos. 1-R, pp. 2-7; 1-SR, pp. 9-11.

1 Alexander notes in her surrebuttal testimony,³ I estimate the Company's
2 incremental costs of conducting the study to be approximately \$7,600, which the
3 Company would recover through its next DSP proceeding.

4

5 **Q. Ms. Alexander also recommends that the Company conduct a customer**
6 **survey concerning their understanding and opinion of the SOP.⁴ Is the**
7 **Company open to performing such a survey?**

8 A. Yes. The Company is open to performing such a survey if the Commission so
9 directs, with results being provided in the next DSP filing. I estimate the
10 incremental costs of conducting a survey to be \$10,000 - \$15,000,⁵ which the
11 Company would recover through its next DSP proceeding.

12

13 **Q. With respect to the Company's proposal to outsource SOP administration to**
14 **a third-party vendor, what is Ms. Alexander's response to the Company's**
15 **plans to monitor its vendor's performance?**

16 A. Ms. Alexander dismisses the Company's oversight plans as inadequate. In response
17 to my statements that the Company will monitor calls as part of a quality assurance
18 program, she opines:

19 This is a typical response by EDCs to this issue. However, that
20 oversight will require more time and expense by DLC that she
21 ignores in her presentation of this proposed change to the SOP.
22 The fact that DLC appears willing to pay for increased oversight
23 and monitoring of AllConnect without apparent concern about the

³ OCA Statement No. 2-S, p. 12, lines 11-13.

⁴ OCA Statement No. 2-S, p. 2, lines 7-13.

⁵ See OCA Statement No. 2-S, p. 12, lines 13-14.

1 level of these costs or how those costs will be recovered is not
2 reasonable in light of her refusal to incur any costs for customer
3 oriented surveys about the SOP or the prices charged by suppliers
4 after the SOP contract.⁶
5

6 **Q. Does the absence of a cost estimate indicate that the Company will not**
7 **conduct robust oversight of its vendor, as Ms. Alexander suggests?**

8 A. No. The Company has an existing quality assurance team that is responsible for
9 reviewing internal calls, and I believe they can additionally review Allconnect calls
10 at no incremental cost. Ms. Alexander notes in her surrebuttal that she has been
11 satisfied with the call transfers she has reviewed. We expect that our quality
12 assurance program will continue to be successful.

13
14 **II. ALLCONNECT TRANSFERS**

15 **Q. With respect to the Company's current transfer scripts from the Company to**
16 **Allconnect, Ms. Alexander recommends that the script be modified to**
17 **expressly ask for customer consent as a precondition of the call transfer.⁷**
18 **Please respond.**

19 A. I accept Ms. Alexander's recommendation to get express customer consent before
20 the call transfer. The Company will employ the following script modification for
21 its current referrals to Allconnect:

22 *"You're all set! With your permission, I'd like to transfer you to our*
23 *partner, Allconnect. They do a great job of helping our customers*
24 *set up or transfer their internet, TV, and phone. May I go ahead and*
25 *connect you to an Allconnect agent?"*

⁶ OCA Statement No. 2-S, p. 10, lines 8-13.

⁷ OCA Statement No. 2-S, p. 11, lines 11-12.

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9

The Company will employ similar language upon transitioning SOP administration to Allconnect:

“You’re all set! With your permission, I’d like to transfer you to our partner, Allconnect. They do a great job of helping our customers understand potential rate savings through the Standard Offer Program and set up or transfer internet, TV, and phone. May I go ahead and connect you to an Allconnect agent?”

10 **III. EGS BILLING PROCEDURES**

11 **Q. In her surrebuttal testimony, OCA witness Alexander states, “DLC uses a**
12 **‘bill ready’ billing format. Supplier charges are presented in a single dollar**
13 **amount and without the actual cents per kWh for generation supply that are**
14 **disclosed by suppliers to their customers at the time of enrollment.”⁸ Are**
15 **these statements accurate?**

16 **A.** Not entirely. First, contrary to Ms. Alexander’s implication, DLC does not
17 exclusively employ bill-ready billing for consolidated-billed EDC and EGS
18 charges. DLC provides suppliers the options of bill-ready and rate-ready
19 consolidated billing. As of August 31, 2020, approximately 46,390 consolidated-
20 billed residential EGS customers are billed through bill-ready billing, and
21 approximately 97,044 are billed through rate-ready billing.

22 Second, Ms. Alexander is not correct that supplier charges are not presented
23 in actual cents per kWh for generation supply. Rate-ready EGS charges – which
24 comprise the majority of residential EGS customers – are always displayed in actual

⁸ OCA Statement No. 2-S, p. 13, lines 7-9.

1 cents per kWh. Moreover, as a practical matter, EGSs using bill-ready billing
2 typically also display their supply charges in actual cents per kWh. However, as I
3 indicated in my surrebuttal testimony, some EGS products are not amenable to
4 being represented in an actual cents per kWh format. Bill-ready billing provides
5 EGSs the ability to offer those products.

6

7 **Q. Ms. Alexander recommends that the Company issue a notice to EGSs that, in**
8 **part, notifies EGSs that charges for nonbasic service may not be included in**
9 **the Company's Purchase of Receivables ("POR").⁹ Do you agree?**

10 A. Yes. The Company will issue a notice to EGSs of this existing prohibition on
11 nonbasic charges in the POR.

12

13 **Q. Does this conclude your surrebuttal testimony?**

14 A. Yes, it does.

⁹ OCA Statement No. 2-S, p. 14, lines 18-20.

Exhibit DBO-10

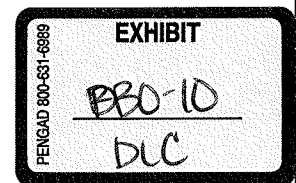
SUPPLEMENT NO. 26XX
TO ELECTRIC – PA. P.U.C. NO. 3S

DUQUESNE LIGHT COMPANY

ELECTRIC GENERATION SUPPLIER COORDINATION TARIFF

Issued By

DUQUESNE LIGHT COMPANY
411 Seventh Avenue
Pittsburgh, PA 15219



Steven E. Malnight
President and Chief Executive Officer

Issued: Xxxxxxxx xx, XXXX

Effective: Xxxxxxxx xx, XXXX

Issued pursuant to the Commission's Order
entered Xxxxxxxx XX, XXXX, at Docket No. P-2020-XXXXXXX.

NOTICE

THIS TARIFF SUPPLEMENT UPDATES THE TABLE OF CONTENTS,
ADDS AND REMOVES PAGES FROM TARIFF NO. 3S AND UPDATES LANGUAGE
IN EXISTING RULES AND EXISTING RIDERS

See Page Two

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Table of Contents Twelfth Revised Page No. 3
Cancelling Eleventh Revised Page No. 3

Page numbers 2A – 2F have been added to Tariff No. 3S.

The List of Modifications page numbers have been revised in the Table of Contents to reflect the addition of page numbers 2A through 2F.

Explanation of Terms and Explanation of Abbreviations Fourth Revised Page No. 5
Cancelling Third Revised Page No. 5

Creditworthy
Customer(s)
Dual Billing

First Revised Page No. 5A
Cancelling Original Page No. 5A

EGS Tariff
Electric Distribution Company ("EDC")
Electric Generation Supplier ("EGS")

Fifth Revised Page No. 6
Cancelling Fourth Revised Page No. 6

PowerMeter
InSchedules

Fifth Revised Page No. 6A
Cancelling Fourth Revised Page No. 6A

Scheduling Coordinator

Second Revised Page No. 6B
Cancelling First Revised Page No. 6B

Wholesale Supplier

Definitions have been updated to reflect housekeeping/administerial revisions as well as current business practice.

Rules and Regulations Second Revised Page No. 7
Cancelling First Revised Page No. 7

1. The Tariff
1.1 Filing and Posting

Language has been revised to remove "duquesnelight" and insert "customer-choice."

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations First Revised Page No. 9
3. Commencement of EDC/EGS Coordination Cancelling Original Page No. 9
3.1 Registration for Coordination Services

Language has been revised to remove "consisting of" and replace it with "including."

Language has been revised and/or added to Item C through Item G to reflect current business practice.

Rules and Regulations Second Revised Page No.10
3. Commencement of EDC/EGS Coordination Cancelling First Revised Page No. 10
3.9 Identification Numbers

Language has been added to reflect current business practice.

Rules and Regulations Third Revised Page No.12
4. Coordination Obligations Cancelling Second Revised Page No. 12
and First Revised Page Nos. 13A and 13B

4.11.2 Electronic Mail

Language has been added to correct a typographical error.

Rules and Regulations Third Revised Page No.12
4. Coordination Obligations Cancelling Second Revised Page No. 12
and First Revised Page Nos. 13A and 13B

4.12 Payment Obligation

Language has been revised to add the word "EGS." Administerial revision, capitalizing the "T" in tariff.

This Page Intentionally Left Blank First Revised Page No. 13A
Cancelling Original Page No. 13A

This Page Intentionally Left Blank First Revised Page No. 13B
Cancelling Original Page No. 13B

First Revised Page No. 13A and First Revised Page No.13B have been removed from Tariff No. 3S as they are no longer necessary. Both pages are cancelling out with Third Revised Page No. 12.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations Third Revised Page No. 14
5. Direct Access Procedures Cancelling Second Revised Page No. 14
5.1.2 B. - No. 1) Network Transmission Service Peak Load Contribution (1 CP)

Rules and Regulations Fifth Revised Page No. 15
5. Direct Access Procedures Cancelling Fourth Revised Page No. 15 and Second Revised Page No. 15A
5.1.2 B. - No. 2) Peak Load Contribution (5 CP)

Language has been added to reflect current business practice.

This Page Intentionally Left Blank Second Revised Page No. 15A
Cancelling First Revised Page No. 15A

Second Revised Page No. 15A has been removed from Tariff No. 3S as it is no longer necessary.

Rules and Regulations Sixth Revised Page No. 17
5. Direct Access Procedures Cancelling Fifth Revised Page No. 17
5.2 Switching Among EGSs and The Company
5.2.1
5.2.3
5.2.5

Rules and Regulations Sixth Revised Page No. 18
5. Direct Access Procedures Cancelling Fifth Revised Page No. 18
5.2 Switching Among EGSs and The Company
5.2.5 – (Continued)

Rules and Regulations Sixth Revised Page No. 19
5. Direct Access Procedures Cancelling Fifth Revised Page No. 19
5.2 Switching Among EGSs and The Company
5.2.8

Rules and Regulations Fifth Revised Page No. 19A
5. Direct Access Procedures Cancelling Fourth Revised Page No. 19A
5.2 Switching Among EGSs and The Company
5.2.9

Language has been revised for clarity and to reflect current business practice.

Rules and Regulations Sixth Revised Page No. 19B
5. Direct Access Procedures Cancelling Fifth Revised Page No. 19B
5.2 Switching Among EGSs and The Company
5.2.11

Rule No. 5.2.11 has been reorganized and renumbered to Rule 5.4.4 for clarity.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations Fourth Revised Page No. 20
5. Direct Access Procedures Cancelling Third Revised Page No. 20
5.4 Provisions Relating To An EGS's Customers
5.4.4

Rule No. 5.4.4 has been renumbered from Rule 5.2.11.

Rules and Regulations Second Revised Page No. 21
6. Load Forecasting Cancelling First Revised Page No. 21
6.2.1 Forecasts for Monthly or Daily Metered and Unmetered – (Such As Streetlights) Customers
6.2.3 Historical Load Profile Data

Rules and Regulations Second Revised Page No. 22
6. Load Forecasting Cancelling First Revised Page No. 22
6.4 Forecasting Process
6.4.1 Daily Forecasts

Language has been revised and/or added for clarity.

Rules and Regulations Third Revised Page No. 24
7. Day After Load Estimates and Supply Schedules Cancelling Second Revised Page No. 24
7.1 Total Day After Load Estimates
7.2 Daily Load Scheduling Process (Day After Load Obligations)
7.2.1 Uploading Schedules
7.2.2 Load Schedule Changes

Language has been added and/or revised to reflect current business practice.

Rules and Regulations Third Revised Page No. 25
8. Reconciliation Cancelling Second Revised Page No. 25
8.1 General Description

The word "at" has been removed and replaced with the word "of."

Rules and Regulations First Revised Page No. 29
11. Confidentiality of Information Cancelling Original Page No. 29
11. Generally

Language has been added and/or removed for clarity.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations Seventh Revised Page No. 30
12. Payment and Billing Cancelling Sixth Revised Page No. 30
12.1 Customer Billing By The Company
12.1.5 Company Reimbursement to EGS for Customer Payments

Rules and Regulations Fifth Revised Page No. 30A
12. Payment and Billing Cancelling Fourth Revised Page No. 30A
12.1 Customer Billing By The Company
12.1.7 Purchase of EGS Receivables (POR) Program
12.1.7.1 Eligibility Requirements
12.1.7.2 Purchase Price Discount

Rules and Regulations Sixth Revised Page No. 30B
12. Payment and Billing Cancelling Fifth Revised Page No. 30B
12.1.7 Purchase of EGS Receivables (POR) Program
12.1.7.2.2 Purchase Price Discount Adjustment for Individual EGS
12.1.7.4 Other Payment Provisions

Rules and Regulations Fourth Revised Page No. 30C
12. Payment and Billing Cancelling Third Revised Page No. 30C
12.1.7 Purchase of EGS Receivables (POR) Program
12.1.7.5 Transfer of Collection Responsibilities and Rights

Rules and Regulations First Revised Page No. 31
12. Payment and Billing Cancelling Original Page No. 31
12.2.2 Billing Corrections and Estimated Billings
12.2.5.1 EGS Offset

Language has been updated for housekeeping/administerial revisions as well as added and/or removed to reflect current business practice.

Rules and Regulations Fifth Revised Page No. 30A
12. Payment and Billing Cancelling Fourth Revised Page No. 30A
12.1 Customer Billing By The Company
12.1.7 Purchase of EGS Receivables (POR) Program

The dates of the Purchase of Receivables Program ("POR") have been updated to reflect the term of DSP IX.

Rules and Regulations First Revised Page No. 31
12. Payment and Billing Cancelling Original Page No. 31
12.2.2 Billing Corrections and Estimated Billings

Language has been revised to align the period during which bills are subject to correction with the time period applicable to previously unbilled utility service, 52 Pa. Code § 56.14.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations First Revised Page No. 33
13. Withdrawal By EGS From Retail Service Cancelling Original Page No. 33
13.2 Notice to Customers

Language has been added to reflect current business practice.

Rules and Regulations Sixth Revised Page No. 34
14. Discontinuance of EGS Service to Particular Customers Cancelling Fifth Revised Page No. 34
14.4.1 Customer Must Initiate The Switch to Default Service

Language has been updated for housekeeping/administerial revisions as well as added and/or removed to implement, in part, the Company's proposed Customer Assistance Shopping Program.

Rules and Regulations First Revised Page No. 36
15. Liability Cancelling Original Page No. 36
15.4 Tax Indemnification

Language has been updated for housekeeping/administerial revisions.

Rules and Regulations Fourth Revised Page No. 42A
Load Data Supply Charge Cancelling Third Revised Page No. 42A
-Method of Payment

Language has been revised in the "Method of Payment" section to update the mailing address.

Language has been revised in regard to payment through a wire/ACH transfer in the "Method of Payment" section.

The Company's banking information has been removed from the bottom of the "Method of Payment" section.

Rules and Regulations Fourth Revised Page No. 42B
Standard Offer Program Cost Recovery Cancelling Third Revised Page No. 42B
-Background
-Supplier Charges

Language has been revised to reflect DSP IX.

Rules and Regulations Fourth Revised Page No. 42B
Standard Offer Program Cost Recovery Cancelling Third Revised Page No. 42B
-Customer Acquisition Fee

The Customer Acquisition fee has increased from \$10.28 to \$30.00 in DSP IX.

LIST OF MODIFICATIONS MADE BY THIS TARIFF

CHANGES

Rules and Regulations Fourth Revised Page No. 42B
Standard Offer Program Cost Recovery Cancelling Third Revised Page No. 42B
-Billing and Payment

Language has been revised in the "Billing and Payment" section to update the mailing address.

Language has been revised in regard to payment through a wire/ACH transfer in the "Billing and Payment" section.

The Company's banking information has been removed from the bottom of the "Billing and Payment" section.

Table 1 Third Revised Page No. 49
Real Power Distribution Losses Cancelling Second Revised Page No. 49

Table 1 was modified to remove the < 138 kV language from Rate L – Large Power Service and to remove the line item for Rate L – Large Power Service ≥ 138 kV to make the loss provisions consistent with rate design changes approved and reflected in the Company's retail electric tariff as per the Company's 2018 base rate case at Docket No. R-2018-3000124, Order Entered December 20, 2018.

The MTS – Municipal Traffic Signals line item has been revised to UMS – Unmetered Service, consistent with the current designation of that customer class in the Company's retail electric tariff.

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(C)

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(C) – Indicates Change

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

Coordination Services Charges - All charges stated in the charges section of this tariff, that are billed by the Company for Coordination Services performed hereunder.

Coordinated Supplier - An Electric Generation Supplier that has appointed a Scheduling Coordinator as its designated agent for the purpose of submitting energy schedules to the PJM OI.

Creditworthy - A creditworthy EGS pays the Company's charges as and when due and otherwise complies with the Rules and Regulations of this tariff ~~or~~ and the Pennsylvania Public Utility Commission. To determine whether an EGS is creditworthy, the Company will evaluate the EGS's record of paying Company charges, and may also take into consideration the EGS's credit history. (C)

Customer(s) - Any person, partnership, association, corporation, municipality, government agency, or other legal entity receiving, or eligible to receive, Competitive Generation Service from an EGS in accordance with the Competition Act. ~~Any person, municipality, partnership, association, or corporation receiving Competitive Energy Supply from an Electric Generation Supplier in accordance with the Competition Act.~~ (C)

Customer Choice Internet Site - A Company Internet site with a Uniform Resource Locator (URL) of <http://www.customer-choice.com>.

Default Service - The Company will provide electricity to the customer in the event that a customer: 1) elects not to obtain electricity from an EGS; 2) elects to have the Company supply electricity after having previously purchased electricity from an EGS; 3) contracts with an EGS who fails to supply electricity, or 4) has been returned to Default Service by the EGS under circumstances as described in Rule No. 45.2 of the Company's retail tariff.

Deliver - To "deliver" a document or other item under this tariff shall mean to tender by certified mail, hand delivery, or overnight express package delivery service.

Delivery - The actual delivery of energy with respect to an energy schedule.

Demand Response - The process for arranging to have firm load become interruptible in accordance with criteria established by the PJM OI.

Direct Access - "Direct Access" shall have the meaning set forth in the Competition Act.

DLCO Zone - The PJM defined area encompassing the franchised service territories of the Duquesne Light Company.

DLCO Residual Zone - The PJM defined area encompassing the aggregate of all load buses within the franchised service territories of the Duquesne Light Company minus all load that has been designated to be priced at a specific nodal location.

Dual Billing - A billing service option where the Company and the EGS separately send their bills directly to the Customer. (C)

EDC Tariff - The Company's currently Pennsylvania Public Utility Commission approved Electric Service Tariff.

EGS Representative - Any officer, director, employee, consultant, contractor, or other agent or representative of an EGS in connection with the EGS's activity ~~solely~~ as an EGS. To the extent an EGS is a division or group of a company, the term EGS Representative does not include any person in that company who is not part of the EGS division.

EGS Tariff - This Electric Generation Supplier Coordination Tariff, Electric-Pa. P.U.C. No. 3S. (C)

DUQUESNE LIGHT COMPANY
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PITTSBURGH, PA. 15219

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Electric Distribution Company (EDC) - A public utility providing facilities for the distribution of electricity to retail customers that owns electric distribution facilities. At times, this term is used to refer to the role of the Company as a deliverer of Competitive Energy Supply in a direct access environment as contemplated in the Competition Act.

(C) – Indicates Change

(C)

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

Electric Generation Supplier (EGS) - A supplier of electric generation that has been certified or licensed by the Pennsylvania Public Utility Commission to sell electricity to retail customers within the Commonwealth of Pennsylvania in accordance with the Competition Act. Duquesne Light Company does not constitute an EGS for the purposes of this tariff.

(C)

Electronic Data Exchange Working Group (EDEWG) - The Pennsylvania Public Utility Commission authorized working group established under the Proposed Standards for Electronic Data Transfer and Exchange Between EDCs and EGSs, Docket No. M-00960890F.0015.

Electronic Data Interchange (EDI) - The computer application to computer application exchange of business information in a standard format, as more fully described in Pennsylvania Public Utility Commission Docket No. M-00960890F.0015.

(C) – Indicates Change

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

Electronic Exchange - Approved methods of data exchange (either through a VAN mailbox or a method to be defined by the EDEWG and approved by the Pennsylvania Public Utility Commission).

Electricity Provider - The term refers collectively to the EDC, EGS, electricity supplier, marketer, aggregator and/or broker, as well as any third party acting on behalf of these entities.

eMtr-PowerMeter System - Software program administered by the PJM OI that retrieves revenue meter data for PJM transmission and generation interconnection points and calculates Electric Distribution Companies' and Generation Owners' metered interchange energy amounts used for real-time energy market settlements. (C)

IneSchedules - Software program administered by the PJM OI through which energy schedules may be submitted. (C)

FERC - The Federal Energy Regulatory Commission.

Final Forecast - The day ahead hourly forecast for energy to be supplied the next day.

Individual Coordination Agreement (ICA) - The agreement between the Company and the EGS to conduct business in the DLCO Zone. The ICA is attached as a Rider to this tariff.

Interest Index - An annual interest rate determined by the average of 1-Year Treasury Bills for September, October and November of the previous year.

Interval Metering Data - Data from electrical metering equipment that supplies hourly or sub-hourly readings of customer consumption.

Kilowatt or kW - Unit of measurement of useful power equivalent to 1000 watts.

Meter Read Date - The date on which the Company reads a meter for purposes of switching for an off-cycle switch or producing a customer bill in accordance with the regularly scheduled billing cycles of the Company.

Month - A month, as defined under 52 PA Code § 56.2.

Load Bus - As used in this tariff, shall have the same meaning ascribed to the term in the PJM Tariff.

Load Serving Entity (LSE) - An entity that has been granted the authority or has an obligation pursuant to State or local law, regulation or franchise to sell electric energy to end-users located within the PJM Control Area as that term is defined by the PJM Tariff.

Locational Marginal Price (LMP) - The hourly-integrated marginal price to serve load at individual locations throughout PJM, calculated by the PJM OI as specified in the PJM Tariff.

Megawatt or MW - One thousand kilowatts.

NERC - The North American Electric Reliability Corporation. The agency given the authority by FERC to enforce reliability standards in the United States.

Network Integration Transmission Service Reservation - A reservation under the PJM Tariff of Network Integration Transmission Service, which allows a transmission customer to integrate and economically dispatch generation resources located at one or more points in the PJM Control Area to serve its Network load as that term is defined by the PJM Tariff.

(C) - Indicates Change

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

Peak Load Contributions (PLCs) - A customer's contribution to the DLCO Zone's normalized summer peak load as calculated by the zone's Electric Distribution Company and used in determining a Load Serving Entity's Peak Load obligation.

Pennsylvania Public Utility Commission or Commission - The Pennsylvania Public Utility Commission.

PJM - PJM Interconnection, L.L.C.

PJM Control Area - The area encompassing electric systems recognized by the North American Electric Reliability Council as the "PJM Control Area."

PJM Miscellaneous Charges - PJM miscellaneous energy related allocations or charges or credits billed to the EDC and not to the LSE.

PJM OI - The PJM Office of Interconnection, the system operator for the PJM Control Area.

PJM Tariff or OATT - The PJM Open Access Transmission Tariff on file with the FERC and which sets forth the rates, terms and conditions of transmission service over transmission facilities located in the PJM Control Area.

Preliminary Forecast - The forecast per hour per LSE posted on the customer choice website based on business day-ahead.

Rate Ready - A form of consolidated billing where Duquesne Light calculates the charge to be presented on the supplier portion of the bill based upon the rates previously supplied by the electric generation supplier ("EGS").

Retail Load Responsibility (RLR) - For non-metered and monthly metered load, the sum total of the estimated hourly load plus transmission losses, distribution losses and the EGS's pro rata share of UFE within the service territory of the EDC, for which the EGS must provide energy to its customers. For hourly metered customers, the sum total of the hourly consumed load of all of an EGS's customers, adjusted for transmission losses, distribution losses and the EGS's pro rata share of UFE within the service territory of the EDC, for which the EGS must provide energy to its customers.

Scheduling Coordinator - Entity that performs, and had been duly certified or licensed by the Pennsylvania Public Utility Commission to perform, one or more of an EGS's Coordination Obligations, including the submission of energy schedules to the PJM OI, and that either is (1) a member of the PJM Interconnection, L.L.C. or (2) is the agent, for scheduling purposes, of one or more Electric Generation Suppliers that are members of the PJM Interconnection, L.L.C.

Tariff - This Electric Generation Supplier Coordination Tariff.

Transmission Losses - Real Power Transmission Losses are associated with all transmission service. The Transmission Provider is not obligated to provide Real Power Losses. The Transmission Customer is responsible for replacing losses associated with all transmission service as calculated by the Transmission Provider. The applicable Real Power Transmission Loss factor is defined in Rule No. 4.7.

(C) - Indicates Change

DEFINITION OF TERMS AND EXPLANATION OF ABBREVIATIONS - (Continued)

Unaccounted for Energy (UFE) - Is the difference between the actual DLCO Zone's total hourly system load and the total hourly consumed power grossed up for transmission and distribution losses plus any PJM miscellaneous energy or energy related allocations to the EDC.

Value Added Network (VAN) - A method of data transfer that allows information to be sent and received electronically using an electronic mailbox. This method meets minimum criteria in the following areas:

- Security and/or encryption of transactions and customer information;
- Proof of transmission and receipt;
- Positive identity of sender and recipient (non-repudiation);
- Reliability;
- Data and file integrity;
- Network performance and availability; and
- Recoverability and archiving of data.

Wholesale Load Responsibility (WLR) – For non-metered and monthly metered load, the sum total of the estimated hourly load for all of the Company's default service customers plus transmission losses, distribution losses, and the wholesale supplier's pro rata share of UFE, within the service territory of the EDC, for which the Company's wholesale suppliers must provide energy to its default service under the EDC Retail Tariff. For hourly metered customers, the sum total of the hourly consumed load of all the Company's default service customers plus transmission losses, distribution losses and the wholesale supplier's pro rata share of UFE within the service territory of the EDC, for which the Company's wholesale suppliers must provide energy to its default service under the EDC Retail Tariff.

Wholesale Supplier – The Company's supplier of all-generation resources necessary to meet the Company's default service obligations.

(C)

(C) – Indicates Change

RULES AND REGULATIONS

1. THE TARIFF

1.1 FILING AND POSTING A copy of this tariff, comprising of the Definitions, Rules and Regulations, Charges and Riders, under which the Company will provide Coordination Services to Electric Generation Suppliers, is filed with the Pennsylvania Public Utility Commission ("PaPUC"). A copy of the Tariff may be obtained by calling, e-mailing or writing the Company's business office. The Tariff may also be accessed at www.duquesnelightcustomer-choice.com and is posted and open to inspection at the offices of the Company where payments are made by customers. (C)

1.2 REVISIONS This tariff may be revised, amended, supplemented or otherwise changed from time to time in accordance with the Pennsylvania Public Utility Code, and such changes, when effective, shall have the same force as the present tariff.

1.3 APPLICATION The tariff provisions apply to all EGSs providing Competitive Energy Supply to customers located in the Company's service territory, including an affiliate or division of the Company that provides Competitive Energy Supply, and with whom the Company has executed an Individual Coordination Agreement as required herein. In addition, the charges herein shall apply to anyone receiving service unlawfully or to any unauthorized or fraudulent receipt of Coordination Services.

1.4 RULES AND REGULATIONS The Rules and Regulations, filed as part of this tariff, are a part of every Individual Coordination Agreement entered into by the Company pursuant to this tariff and govern all Coordination Activities, unless specifically modified by a charge or rider provision. The obligations imposed on EGSs in the Rules and Regulations apply as well to everyone receiving service unlawfully or to any unauthorized or fraudulent receipt of Coordination Services.

1.5 USE OF RIDERS The terms governing the supply of Coordination Services under this tariff or a charge therein may be modified or amended only by the application of those standard riders, filed as part of this tariff.

1.6 STATEMENT BY AGENTS No Company representative has authority to modify a tariff rule or provision, or to bind the Company by any promise or representation contrary thereto.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

3. COMMENCEMENT OF EDC/EGS COORDINATION

3.1 REGISTRATION FOR COORDINATION SERVICES An EGS seeking to obtain Coordination Services hereunder must deliver to the Company a completed registration, ~~consisting of~~including the following:

(C)

A. An Individual Coordination Agreement, as contained in a rider hereto, fully executed in triplicate by a duly authorized representative of the EGS;

B. A copy of the EGS's operating license or Pennsylvania Public Utility Commission order licensing the EGS to operate;

C. The EGS's completed IRS Form W-9;

(C)

D. The EGS's completed EGS Onboarding Form, including:

(C)

(i) The Dun & Bradstreet number(s) assigned to the EGS;

(ii) The EGS's banking information (account number, routing number, etc.), provided on EGS letterhead and signed by two authorized EGS representatives;

E. The EGS's Pennsylvania sales tax identification number; and

(C)

F. EGS proof of PJM membership; and

(C)

G. Any other completed documents as necessary to comply with PaPUC or PJM requirements.

(C)

3.2 INCOMPLETE REGISTRATIONS In the event the EGS submits an incomplete registration, the Company shall provide written notice to the EGS of the registration's deficiencies within ten (10) business days after the date of service, as determined under 52 Pa. Code § 1.56. The Company will not process an incomplete registration until the EGS corrects the deficiencies and the EGS delivers the registration to the Company.

3.3 CREDIT CHECK A registration for Coordination Services shall constitute authorization to the Company to conduct a background credit check on the EGS.

3.4 PROCESSING OF REGISTRATIONS The Company shall complete the processing of each registration for Coordination Services within ten (10) business days after the date of service of the registration, as determined under 52 Pa. Code § 1.56. The Company shall approve all completed registrations unless grounds for rejecting the registration, as defined below, exist.

3.5 GROUNDS FOR REJECTING REGISTRATION The Company may reject any registration for Coordination Services on any of the following grounds:

A. The EGS has undisputed outstanding debts to the Company arising from its previous receipt of Coordination Services from the Company under this tariff;

B. The EGS has failed to comply with credit requirements specified in Rule No. 12 of this tariff;

C. The EDC has provided written notice to the EGS that a registration is deficient, pursuant to 52 Pa. Code § 1.56, and the EGS has failed to submit a completed registration within thirty (30) calendar days after the date of service of the registration.

The Company may also petition the Pennsylvania Public Utility Commission to reject the registration of an EGS with bad credit. The Company need not provide Coordination Services to the EGS pending the Pennsylvania Public Utility Commission's review of said petition unless the EGS has provided security to the Company as provided for in Rule No. 12.4.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

3. COMMENCEMENT OF EDC/EGS COORDINATION - (Continued)

3.6 OFFER OF CONDITIONAL ACCEPTANCE OF REGISTRATION Where grounds for rejection of a registration exist due to an EGS's outstanding and undisputed debts to the Company arising from its previous receipt of Coordination Services from the Company under this tariff, the Company may offer the affected EGS a conditional acceptance if the EGS pays such debts before it receives Coordination Services. If the EGS rejects the Company's offer of conditional acceptance under this Rule, then its registration for Coordination Services will be deemed rejected.

3.7 REJECTION OF REGISTRATION Upon rejection of any registration, the Company shall provide the affected EGS with written notice of rejection within the time periods set forth in Section 3.4, and shall state the basis for its rejection.

3.8 APPROVAL OF REGISTRATION Upon its approval of a registration for Coordination Services, or pursuant to an Order of the Commission approving a registration, the Company shall execute the Individual Coordination Agreement tendered by the registrant, and shall provide one to the EGS by delivering such within the period set forth in Section 3.4 and shall maintain a copy for its own records.

3.9 IDENTIFICATION NUMBERS Upon its approval of a registration for Coordination Services, the Company will use the Dun & Bradstreet number assigned to each EGS to be used in subsequent electronic information exchange between the EGS and the Company. In addition, the Company may also assign to the EGS identification numbers that may be required by PJM in connection with the submission and/or confirmation of load schedules for serving load in the Company's service territory.

(C)

3.10 COMMENCEMENT OF COORDINATION SERVICES Coordination Services shall commence within fifteen (15) days after the Company's acceptance of an EGS's registration for Coordination Services provided that all of the information necessary for the Company to provide Coordination Services has been provided to the Company and any conditions required under Rule No. 3.6 have been satisfied by the EGS.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

4. COORDINATION OBLIGATIONS - (Continued)

4.10 SUPPLY OF DATA An EGS and the Company shall supply to the other all data, materials or other information specified in this tariff, or otherwise reasonably required by the EGS or Company in connection with the provision of Coordination Services, in a thorough and timely manner.

4.11 COMMUNICATION REQUIREMENTS An EGS shall implement a VAN and a single Internet file transfer protocol, as determined by the EDEWG and Pennsylvania Public Utility Commission Docket No. M-00960890.F0015. Both data transfer methods must meet the minimum criteria of, and be endorsed by, the EDEWG.

4.11.1 CUSTOMER CHOICE INTERNET ACCESS An EGS shall have appropriate software for access to the Customer Choice Internet Site and file uploads and downloads.

4.11.2 ELECTRONIC MAIL An EGS shall have appropriate software to communicate regularly by electronic mail (e-mail), including the capability to receive ASCII file attachments. (C)

4.12 PAYMENT OBLIGATION The Company's provision of Coordination Services to an EGS is contingent upon the EGS's payment of all charges provided for in this EGS Tariff. (C)

4.13 RECORD RETENTION An EGS and the Company shall comply with all applicable laws and Pennsylvania Public Utility Commission rules and regulations for record retention, including but not limited to those Rules of Chapter 56 of the Pennsylvania Public Utility Commission's regulations.

4.14 DATA EXCHANGE

- A. Subject to Rule 4.14(B), below, the Company shall make available to an EGS, on a daily basis, customer, billing and financial transaction information regarding that EGS's customers in electronic files available via electronic exchange. These files will be consistent with standards developed by the EDEWG.
- B. An EGS must notify its customers that by signing up for Competitive Energy Supply with the EGS, the customer is consenting to the disclosure by the Company to the EGS of certain basic information about the customer, as listed in Rule 4.14(A). At minimum, the notice shall inform the customer that the following information will be disclosed: the customer's name, address, Duquesne Light Company account number and rate class.
- C. The Company will maintain on the Customer Choice Internet Site copies of the standard file formats it will provide to EGSs containing the data listed in this Rule of this tariff. The Company will not change the file formats without first providing at least seven days notice of any such change via electronic exchange and posting on the Customer Choice Internet Site. The Company will make a good faith effort to provide a greater period of notice when warranted.
- D. Nothing in this Rule 4.14 shall prohibit the Company from making available to EGSs other electronic data, in formats chosen by the Company consistent with the recommendations of the EDEWG. The Company will not change the file formats of the electronic data made available under this Rule 4.14(D) without first providing at least seven days notice of such change via electronic exchange and posting on the Customer Choice Internet Site. The Company will make a good faith effort to provide a greater period of notice when warranted.

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RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES

5.0 GENERALLY The procedures for the selection of customers' EGS selection, switching among EGSs and other direct access procedures for obtaining Competitive Energy Supply shall occur in accordance with the direct access procedures set forth in the Enrollment Procedures Applicable to EDCs and EGSs, Docket No. M-00960890F.0014, Standards for Electronic Data Transfer and Exchange Between EDCs and EGSs, Docket No. M-00960890F.0015, Standards for Changing a Customer's Electric Supplier, Docket No. L-00970121 and the Commission's *Rulemaking to Amend the Provisions of 52 Pa. Code, Chapter 57 Regulations Regarding Standards for Changing a Customer's Electricity Generation Supplier*, Docket No. L-2014-2409383, and applicable Commission regulations, as set forth in this tariff.

5.1 DATA REQUIREMENTS

5.1.1 ENROLLMENT EGSs are encouraged to permit customers to enroll by telephone or by e-mail, but must send customer enrollments to the Company via properly formatted electronic files (customer name, customer address, Duquesne Light supplier agreement identification number, and authorization to release telephone number and authorization to release historical usage information) via EDI. EGSs shall forward the electronic files on a daily basis to the Company. The Company will acknowledge receipt of the enrollment file via electronic confirmation. The Company shall provide confirmation within one (1) business day of all electronic files received. Such confirmation shall include appropriate control totals such as number of records received, and the reason for any rejections (e.g., invalid supplier agreement identification number). Such confirmation shall also include information an EGS can use to identify rejected records.

5.1.2 A. ELIGIBLE CUSTOMER LIST In addition to the EDEWG Standard Eligibility List, the Company agrees to provide to EGSs, for all customers who have authorized the release of their information, the most recent available twelve (12) individual months of historical monthly electric usage and billed demand and Network Transmission Service Peak Load Contribution and Peak Load Contribution, per customer account. This information will be provided on the Company's web site in a downloadable format compatible for use with spreadsheet and database applications and will be updated monthly.

B. Methodology for Calculating Peak Load Contributions Used in Determination of Capacity Obligations and Network Transmission Service Peak Load Contributions Beginning January 1, 2005, until instructed otherwise by PJM, the Company will calculate the Peak Load Contributions and the Network Transmission Service Peak Load Contribution as follows:

1) Network Transmission Service Peak Load Contribution (1 CP)

To determine the customer's share of the Network Transmission Service Peak Load, the Company will first calculate the customer's transmission peak load contribution. The transmission peak load contribution is based on the customer's load coincident with Duquesne's transmission system zonal load during the one peak hour of the previous year. For customers that lack sufficient historical load data (e.g., new customers), the Company shall determine the customer's load for purposes of calculating its Network Transmission Service Peak Load Contribution. Second, the customer's load, adjusted for the Company's transmission and distribution line losses and the customer's share of unaccounted for energy (as provided by Rule No. 8 of this tariff), will be the customer's Network Transmission Service Peak Load Contribution.

(C)

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.1 DATA REQUIREMENTS - (Continued)

5.1.2 B. Methodology for Calculating Peak Load Contributions Used in Determination of Capacity Obligations and Network Transmission Service Peak Load Contributions – (Continued)

2) Peak Load Contribution (5 CP)

The Company's capacity obligation will be calculated by PJM based on the Company's peak load contribution and will be the basis for the capacity obligation for the following calendar year.

In determining the customer's share of the capacity obligation, the Company will first calculate the customer's peak load contribution. The peak load contribution is based on the customer's load coincident with PJM's system load during the peak hour of the five peak days for the appropriate PJM Region as provided for in the PJM Manuals/Tariffs. For customers that lack sufficient historical load data (e.g., new customers), the Company shall determine the customer's load for purposes of calculating its Peak Load Contribution. The customer's load in each of these five (5) hours, adjusted for the Company's transmission and distribution line losses and the customer's share of unaccounted for energy in the applicable hours (as provided by Rule No. 8 of this Tariff), will be averaged and the customer's percentage (%) share of the average DLCO system load will then be calculated. The PJM approved forecasted peak for the year will then be multiplied by the customer's percentage (%) share of the average DLCO system load to derive the customer's peak load contribution. When appropriate, zonal loads and customer peak load obligations will be adjusted to account for Demand Response and significant loss of load events.

(C)

This information will be sent to PJM who will calculate each EGS's capacity obligation.

5.1.3 Data Exchange

- A. The list of enrolled customers that the Company provides to all EGSs pursuant to Rule No. 5.1.2 A shall contain information about customers that have consented to the release of customer information in a format to be consistent with that determined by the EDEWG.
- B. The list of enrolled customers that the Company provides to all EGSs pursuant to Rule No. 5.1.2 A shall contain the following information about customers that have not consented to the release of customer information in a format to be consistent with that determined by the EDEWG:
- (i) Duquesne Light Company supplier agreement identification number,
 - (ii) Rate class,
 - (iii) Customer's name, and
 - (iv) Customer's service address.

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RULES AND REGULATIONS - (Continued)

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RULES AND REGULATIONS - (Continued)

(C)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY Rule No. 5.2 delineates the process of customer selection for Competitive Energy Supply or Default Service.

5.2.1 An EGS must notify its customers that by signing up for Competitive Energy Supply with the EGS, the customer is consenting to the disclosure by the Company to the EGS of certain basic information about the customer, as listed in Rule No. 4.14 (a). At minimum, the notice shall inform the customer that the following information will be disclosed: the customer's name, address, Duquesne Light Company supplier agreement identification number, Duquesne Light meter number, and rate class.

(C)

5.2.2 If an enrolled customer or person authorized to act on the customer's behalf contacts the Company to inform the Company that it wishes to obtain Competitive Energy Supply from a particular EGS, the Company will inform the customer of the need to contact the EGS to select the EGS as supplier. The EGS will verify its desire to serve the customer and follow the process outlined in Rule No. 5.2.1.

5.2.3 The EGS will obtain appropriate authorization from the customer, or from the person authorized to act on the customer's behalf, indicating the customer's choice of EGS. The authorization shall include the customer's acknowledgment that the customer has received the notice required by Rule No. 5.2.1. It is the EGS's responsibility to maintain records of the customer's authorization in the event of a dispute, in order to provide documented evidence of authorization to the Company or the Commission. The EGS shall provide such authorization upon request by the Company.

(C)

5.2.4 The EGS shall provide an electronic file to the Company via electronic exchange file format designated by the Company that complies with the Commission's electronic requirements. The required electronic files shall include, at a minimum, EGS ID, Duquesne Light Company supplier agreement identification number, rate code, billing option, price plan (if single bill option is selected), transaction date and transaction time. Upon receipt of the electronic file from the EGS, the Company will automatically confirm receipt of the file via electronic exchange. Within one (1) business day of receipt of the electronic file, the Company will validate the records contained in the file, and will provide an electronic validation, including the number of records received and the reason for any rejections. Such validation shall include appropriate control totals such as number of records received, and the reason for any rejections (e.g., invalid supplier agreement identification number). Such validation shall also include information an EGS can use to identify rejected records.

5.2.5 On a pending switch to an EGS, the Company will send the customer a confirmation letter within one (1) business day notifying the customer of the pending switch. The selection will be effective three (3) business days ~~of~~ after receipt of the request and billing with the selected EGS will begin on the fourth business day. The subsequent EGS will become the EGS of record for delivery further provided that: (1.) all customer information provided to the Company is accurate and complete and (2.) the customer has not contacted the Company to dispute the EGS. In such circumstances, the Company will send the new EGS an electronic file, via electronic exchange, containing information for the new customers of record for that particular EGS, in accordance with Rule 4.14(a). The Company will process any EDI transactions for a switch from an EGS and will assume any rescission period with the EGS has ended.

(C)

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY - (Continued)

5.2.5 - (Continued)

If, during the pending switch request, the customer elects to reject its new EGS selection, the customer will notify the rejected EGS and the EGS shall notify the Company. Upon notice from the EGS, the Company will process a drop for that EGS. In the event the customer rejects its EGS selection after the three day (3) day switching period, the customer will be referred to the EGS per Rule No. 5.2.6.

(C)

Once the switch request is received, the Company will notify the customer's prior EGS, via electronic exchange, of the discontinuance of service to the customer from that prior EGS.

5.2.6 If a customer contacts the Company to request a change of EGS, the Company will direct the customer to contact that EGS and will provide the telephone number of the EGS to the customer, if requested.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY

5.2.7 In accordance with the Secretarial Letter issued August 20, 2010, at Docket No. M-2009-2082042, when requested by an EGS, the Company will provide confidential customer-specific information about a customer with whom the EGS is discussing the possibility of providing Competitive Energy Supply without receiving written authorization from the customer or from the EGS. It is the EGS's responsibility to convey to the customer via its authorization process that the Company will release the confidential customer-specific information only to the EGS to whom authorization was given and that the EGS will not release the information to others, unless the EGS is a licensed broker who is obtaining the confidential customer-specific information for purposes of sharing it with other licensed EGSs and makes that intent clear in communications with the customer. It is the EGS's responsibility to retain the records of the requisite authorization for a minimum of two (2) years to produce for a Commission or Company audit. If an EGS fails an audit conducted either by the Commission or the Company, the Company is then permitted to require that EGS to provide signed documentation indicating that a customer has authorized the release of customer-specific information before it may have access to the restricted customer data.

5.2.8 Subject to Rule No. 14.4 and Rule No. 14.5, if a customer contacts the Company to request a change from an EGS to the Company's ~~tariffed Energy and Capacity Charges~~ for default service under the EDC Retail Tariff, the Company will process the request as follows. The Company will send the customer a confirmation letter within one (1) business day after the customer contacts the Company. The Company will process the selection within three (3) business days of receipt of the request and billing with the Company for default service will begin on the fourth business day. If the customer does not contact the Company to rescind the switch during the pending switch, then the Company will process the request. Once the switch request is received, the Company will notify the customer's prior EGS, via electronic exchange, of the discontinuance of service to the customer from that prior EGS. When an EGS discontinues a customer's service ~~or~~ and no other EGS has ~~agreed~~ contracted with the customer to provide such service, then that customer will be provided with Default Service.

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RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY – (Continued)

5.2.9 Shopping customers may retain their current EGS when moving from one location to a new location within the Company's service territory subject to meeting the eligibility requirements and conditions set forth in Rule No. 45.3 of the Company's retail tariff. Eligible customers include all residential customers as well as commercial and industrial customers that use less than 300 kW of demand as defined in the retail Tariff.

~~The EDC shall notify the EGS via an electronic data interchange (EDI) 814 Move transaction. A new EDI transaction must be created to facilitate the move the customer's of service from the current location to the new location. The new EDI transaction is to be reviewed and approved by the Electronic Data Exchange Working Group (EDEWG) consistent with its current procedures. This EDI transaction will include all the pertinent customer information that an EGS needs, such as customer contact information; new address; name; rate class and load profile; bill option; rate code; tax exemption percentage; billing and meter read cycles; and meter information.~~

(C)

~~The EGS must submit a drop request via electronic data interchange (EDI) if it does not wish to continue service to the customer at the new service location. The EGS will maintain supply service to this customer until a three-business day switch can occur at the new address.~~

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~~An EDI transaction will also be sent for other reasons related to the transaction. Customers requesting to change the start date of their new service would require an EDI 814 Change request to be sent to the existing EGS detailing the new start date, and an EDI 814 Drop request would be sent if the customer decided to cancel the new move.~~

~~In the move transaction, the Company will send the EGS information that is similar to what is currently provided in a reinstate-request transaction, including the customer name, service address and rate class. The Company will also provide the EGS with: (i) the current supply agreement identification number; (ii) the new supply agreement identification number; and (iii) the service start date. Once the move transaction has been sent to the EGS, the EGS will serve the new account as of the service start date.~~

~~If a shopping customer contacts the Company to discontinue electric service at the customer's then-current location, and initiates a request for service at a new location in the Company's service territory and wishes to return to default service, the Company will notify the current EGS, via electronic exchange, of the customer's discontinuance of service for the account at the customer's prior-then-current location. Final bill(s) will be issued to the date of discontinuance of service.~~

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RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.2 SWITCHING AMONG EGSs AND THE COMPANY – (Continued)

5.2.10 Customers starting new service with the Company will be permitted to begin supply service with an EGS on their start date subject to meeting the eligibility requirements in Rule No. 45.4 of the retail tariff.

The Company will accept inbound enrollment requests on accounts that are not yet active. However, the EGS is still responsible for submitting the enrollment request. The final component of this transaction will be to establish an estimated start date. The Company will establish the estimated start date for new service in its communication via the enrollment response sent back to the EGS.

The EGS must submit a drop request via EDI if it does not wish to supply service to the customer. However, the supplier must maintain supply service to this customer until a three-business day switch can occur under the Company's switching rules.

~~5.2.11 If the Company elects to change the supplier agreement identification number for a customer receiving generation service from an EGS, the Company will notify the EGS of the change in supplier agreement identification number at the same customer location, via electronic exchange.~~

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5.3 PROVISIONS FOR CONTRACTING WITH AN EGS TO PROVIDE TOU SERVICE

5.3.1 The Company may contract with an EGS to provide Time-of-Use ("TOU") service, with on-peak and off-peak rates in effect from June through September. The contracted EGS must submit an EDI transaction to enroll customers in the TOU program. Standard switching rules shall apply to customers enrolled in the TOU service program.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

5. DIRECT ACCESS PROCEDURES - (Continued)

5.4 PROVISIONS RELATING TO AN EGS'S CUSTOMERS

5.4.1 ARRANGEMENTS WITH EGS CUSTOMERS EGSs shall be solely responsible for having appropriate contractual or other arrangements with their customers necessary to implement direct access consistent with all applicable laws, Pennsylvania Public Utility Commission requirements, and this tariff. The Company shall not be responsible for monitoring, reviewing or enforcing such contracts or arrangements.

5.4.2 TRANSFER OF COST OBLIGATIONS BETWEEN EGSS AND CUSTOMERS Nothing in this tariff is intended to prevent an EGS and a customer from agreeing to reallocate between them any charges that this tariff imposes on the EGS, provided that any such agreement shall not change in any way the EGS's obligation to pay such charges to the Company, and that any such agreement shall not confer upon the Company any right to seek recourse directly from the EGS's customer for any charges owed to the Company by the EGS.

5.4.3 CUSTOMER OBLIGATIONS Customers of an EGS remain bound by the rules and requirements of the applicable EDC Tariff under which they receive service from the Company.

5.4.4 If the Company elects to change the supplier agreement identification number for a customer receiving generation service from an EGS, the Company will notify the EGS of the change in supplier agreement identification number at the same customer location, via electronic exchange.

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(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

6. LOAD FORECASTING

6.1 CUSTOMER LOAD FORECASTING The EGS is responsible for forecasting its Customer Load Obligations. The Company will provide a forecast respective to each LSE as support information. The company forecasts will be provided in accordance with the following load forecasting procedures.

6.2 FORECASTING METHODOLOGY Most EDC customers utilize monthly (or daily) metering equipment. However, any EDC customer may choose to have the EDC install equipment or otherwise provide for (at the customer's expense at Pennsylvania Public Utility Commission approved rates) interval (hourly or sub-hourly) metering. The forecasting methodology for customers utilizing hourly metering data is slightly different than the methodology for customers utilizing monthly or daily metering equipment.

6.2.1 FORECASTS FOR MONTHLY OR DAILY METERED AND UNMETERED - (SUCH AS STREETLIGHTS) CUSTOMERS For each EGS, the EDC will provide hourly load forecasts for the aggregate of customers who have chosen thean EGS. The EDC has developed and will maintain, based on load survey data, historical load profiles corresponding to the EDC's current rate classes identified in the EDC Tariff. These base profiles will be adjusted for day type (e.g., weekday, weekend, or holiday) and temperature. The EDC will use these rate class load profiles, adjusted for differences between the historical load profile day and the forecast day. The adjusted profiles will be applied to the summation by rate class of the EGS's customer's historical consumption to arrive at the aggregate hourly load forecasts.

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6.2.2 FORECASTS FOR CUSTOMERS UTILIZING HOURLY OR SUB-HOURLY METERING DATA The EDC will provide hourly load forecasts for each EGS customer that has elected to utilize hourly metering data. The EDC will use each customer's same day hourly loads from a previous week and adjust those hourly loads by the temperature factor for that EGS customer's rate class to determine that customer's hourly load forecast. The summation of these forecasts will establish the hourly supply obligation schedule of the EGS for serving these customers.

6.2.3 HISTORICAL LOAD PROFILE DATA The EDC will make available to EGSs the aggregated historical load profiles (including historical temperature data) and any related data which the EDC uses to calculate the hourly forecasts. This information will be available for download from the Customer Choice Internet Site.

(C)

6.2.3.1 UPDATES TO HISTORICAL LOAD PROFILE DATA The EDC shall review from time to time its historical load profile data by rate class and any related data and shall update the data as appropriate.

6.3 ADJUSTMENT FOR LOSSES The forecast/supply obligation will be adjusted to cover transmission and distribution losses.

(C) - Indicates Change

RULES AND REGULATIONS - (Continued)

6. LOAD FORECASTING - (Continued)

6.4 FORECASTING PROCESS

6.4.1 DAILY FORECASTS ~~Each day~~ The EDC shall prepare a forecast for each day: (C)

- (1) A Final hourly Forecast for the next day, which will be used to establish the EDC operational forecast
- (2) A Final Forecast for the next day that is calculated for a temperature that is three (3) degrees Fahrenheit above the temperature used in the Final hourly Forecast. (C)
- (3) A Final Forecast for the next day that is calculated for a temperature that is three (3) degrees Fahrenheit below the temperature used in the Final hourly Forecast. (C)

6.4.2 PROCEDURE FOR FORECASTING The following procedure will be followed each day to determine the Final Forecast.

6.4.2.1 BUSINESS DAYS AND SCHEDULING WINDOW The daily forecasting process shall be performed on each business day. A business day is a weekday excepting PJM holidays. The daily forecasting process shall be performed on each business day for a scheduling window consisting of all following days through the next business day.

For example, the daily forecasting process shall be performed Monday through Thursday (except holidays) for a scheduling window that covers the following day (midnight to midnight). If the following day is a holiday, then the scheduling window shall include the holiday and be extended to include the first business day following the holiday.

Similarly, the daily forecasting process shall be performed on Friday for a scheduling window consisting of the following Saturday, Sunday, and Monday. If the Monday is a holiday, then the scheduling window shall include the holiday and extend through the first business day following the holiday.

In addition to the forecasts required of EGSs hereunder, the EGS may provide advance-hourly forecasts for each of its Customers with Hourly or Sub-Hourly Metering Equipment. Forecasts are not final until the business day before those forecasts are to apply.

Step 1 EDC Determines Hourly Load Forecast By EGS By Rate Class

(A) For Monthly or Daily Metered and Unmetered Customers:

For each rate class, sum each EGS's customer's loads for that rate class, apply the appropriate rate class load profile for the day, and adjust the hourly loads by the temperature factor for the rate class.

Load forecasts will be adjusted for losses as appropriate.

For each EGS, combine all of the rate class hourly load forecasts into a total hourly load forecast.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

7. DAY AFTER LOAD ESTIMATES AND SUPPLY SCHEDULES

7.1 TOTAL DAY AFTER LOAD ESTIMATES The total load estimate for an EGS is expected to be equal to the aggregate hourly load estimates for all of the monthly, hourly, and sub-hourly metered and unmetered customer's usage plus load estimates for any Coordinated Suppliers that have designated that EGS as their Scheduling Coordinator. Load estimates, including distribution losses, transmission losses, and UFE are utilized for the day after IneSchedules. (C)

7.2 DAILY LOAD SCHEDULING PROCESS (DAY AFTER LOAD OBLIGATIONS)

7.2.1 UPLOADING SCHEDULES The Company will submit load estimates into IneSchedules in the form of RLR (or WLR contracts) with view only privileges for the EGS (or municipalities or wholesale suppliers, as appropriate). The RLR (or WLR) contracts submitted by the Company in IneSchedules will be auto-confirmed by the EGS (or municipalities or wholesale suppliers, as appropriate). The Company will upload the load estimates on each business day using the PJM IneSchedules System according to PJM requirements. In accordance with the PJM IneSchedules manual (m09), the PJM IneSchedules application will accept scheduling and delivery of energy for up to three decimal places or one-thousandth (0.001) MWh. The schedule uploaded by the Company shall be binding on that EGS. The Company will provide these same load estimates on the Website by 10:00 AM Eastern Prevailing Time to assist the EGS. (C)

7.2.2 LOAD SCHEDULE CHANGES If the EGS has a dispute, they may notify the Company by telephone. The Company will make reasonable efforts to review and, if the reason for the changes are determined by the Company to be operationally valid, confirm the load schedule changes using the PJM IneSchedules System, prior to the PJM designated deadline. In the absence of confirmation by the Company, the prior supply schedule value will remain in effect. In light of deadlines imposed by the PJM OI for the submission of load schedule changes, an EGS should initiate any necessary changes and notify the Company well before the cut-off time to increase the likelihood that the changes will be accepted. (C)

7.2.3 SUPPLY SCHEDULES The EGS is responsible for supplying generation to meet its load estimates uploaded by the Company in accordance with Rule No. 7.2.1.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

8. RECONCILIATION

8.1 GENERAL DESCRIPTION Reconciliation service accounts for mismatches between an EGS's load estimate as determined in Rule No. 7 for serving its Customers and the energy that was actually used by those Customers. This service differs from Energy Imbalance Service – a related service performed exclusively by the PJM OI under the PJM Tariff – because the latter accounts for differences between an EGS's actual load and the quantity of energy actually delivered by the EGS. Because of the absence of universal real-time metering, the calculation of reconciliation quantities typically must occur after the monthly reading of Customer's meters.

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8.1.1 THE COMPANY'S ROLE The Company will assist PJM in accounting for Reconciliation quantities by (1) collecting all Customer usage data; (2) determining hourly reconciliation quantities for each EGS or Scheduling Coordinator; (3) calculating monthly reconciliation quantities for each EGS or Scheduling Coordinator; and (4) submitting the reconciliation quantities to the PJM OI.

8.2 METER DATA COLLECTION Meter data collected by the Company shall be utilized to calculate the quantity of energy actually consumed by an EGS's customers for a particular reconciliation period.

8.2.1 MONTHLY OR DAILY METERED AND UNMETERED CUSTOMERS The EDC collects daily customer reads for the majority of its customer base. The rate class profile is used to convert the actual daily consumption to equivalent hourly consumption.

If a customer does not have daily reads available, the EDC collects monthly meter data, in subsets corresponding to customer billing cycles, which close on different days of the month. The EDC converts customer's actual monthly consumption to equivalent hourly consumption using the rate class load profiles.

8.2.2 CUSTOMERS UTILIZING HOURLY OR SUB-HOURLY METERING DATA Data from customers utilizing hourly or sub-hourly metering data is collected by the EDC on a daily or monthly basis.

8.3 HOURLY CONSUMPTION Hourly consumption for the customers of each EGS is determined by summing the consumption as described in Rules No. 8.2.1 and 8.2.2.

8.4 CONSUMPTION AND LOSSES Transmission and distribution losses are calculated based upon customer consumption consistent with Rule No. 8.4.1. These losses are added to the hourly energy consumed by customers and are included in the Consumption calculation.

8.4.1 CONSUMPTION CALCULATION The Company will calculate default service load in the same manner in which EGS load is calculated. After meters are read, load profiles will be applied to all customers, including those on default service. When interval meter reading data for a specific customer is available for use, the Company shall use this information in determining load obligation.

8.4.2 UNACCOUNTED FOR ENERGY To determine the proper allocation of losses, average losses by class will be applied to both EGS and default service loads, and unaccounted for energy) will be allocated pro rata among all suppliers, including the default service suppliers.

8.5 BILLING The Company and the EGS will rely on PJM to perform calculations to determine the monetary value of reconciliation quantities and to bill and/or credit EGSs and the Company for oversupplies and undersupplies at an hourly price through the PJM grid accounting system. PJM Miscellaneous Charges will be allocated pro rata among all suppliers, including the default service suppliers.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

11. CONFIDENTIALITY OF INFORMATION

11 **GENERALLY** All confidential or proprietary Company information made available by the Company to an EGS in connection with the provision of Coordination Services, including but not limited to load data, and information regarding the business processes of the Company and the computer and communication systems owned or leased by the Company, shall be used only for purposes of receiving Coordination Services and/or providing Competitive Generation Service to Customers in the Company's service territory. Other than disclosures to EGS representatives for the purpose of enabling an EGS to fulfill its obligations under the EGS Tariff or provide Competitive Generation Service to Customers in the Company's service territory, an EGS may not disclose confidential or proprietary Company information without the Company's prior authorization or consent. All Company information made available to an EGS in connection with the provision of Coordination Services, including but not limited to load curve data, and information regarding the Company, computer and communication systems shall not be disclosed to third parties without appropriate authorization and/or consent.

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11.1 CUSTOMER INFORMATION The EGS shall keep all customer-specific information supplied by the Company confidential unless the EGS has the customer's authorization to do otherwise.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING

12.1 CUSTOMER BILLING BY THE COMPANY All EGS charges to customers, if billed by the Company, shall be billed in accordance with the EDC Tariff and the following provisions:

12.1.1 COMPANY BILLING FOR EGS The Company will bill price plans offered by the EGS which are based on fixed and variable charges similar to those the Company employs for billing distribution service and default service. Nothing in this rule shall require the Company to manually bill customers. Within this context, if the Company's billing system has the capability to bill the price plans offered by the EGS, the EGS may request the Company to do all or some of the billing for the EGS's customers based on the customers' preferences. In addition, the Company will include on its bill EGS late fees and payment arrangements as required by the Pennsylvania Public Utility Commission. However in no case shall the Company require the EGS to provide separate customer lists or perform unique scheduling and reconciliation services for customers billed directly by the Company.

12.1.2 BILLING FILES Where the EGS has requested the Company to act as the EGS's billing agent, the Company shall electronically transmit files of billing detail daily to the EGS. Such files shall include the Company supplier agreement identification number, rate codes, usage information, demand and energy charges, sales tax, and other EGS charges. Billing files transmitted shall have control totals to assure all data was received by the EGS. Control totals include the number of records on the file and significant totals (e.g. total kWh billed, total amount billed, total tax). All billing files will be in a format consistent with standards developed by the EDEWG.

12.1.3 BUDGET BILLING The Company will develop dual tracking systems to administer budget billing and apply payments for EGS charges and Company charges for rate ready billing only.

12.1.4 EGS TAX RESPONSIBILITY The Company is not responsible for paying or remitting on behalf of an EGS taxes including, but not limited to, Pennsylvania Gross Receipts Tax, Pennsylvania Public Utility Realty Tax, Pennsylvania Capital Stock Tax and Pennsylvania Corporate Net Income Tax.

12.1.4.1 SALES TAX EXEMPTION With respect to customers receiving one bill from the Company, the EGS for whom the Company is billing must provide to the Company the applicable sales tax exemption percentage for each customer. The Company will use the sales tax exemption percentage provided by the EGS for billing the EGS's charges. The EGS is responsible for holding appropriate exemption certificates and is liable for the collection and remittance of sales tax on the EGS's charges. The Company will use a zero exemption percentage if no percentage is provided by an EGS.

12.1.5 COMPANY REIMBURSEMENT TO EGS FOR CUSTOMER PAYMENTS For EGSs electing consolidated billing and serving residential and small and medium C&I customers, defined as those on ~~Rate Schedules RS, RH, RA, GS/GM and GM~~ eligible for Rider No. 8 – Default Service Supply of the Company's Retail Tariff, the Company shall forward payment in accordance with the provisions of Rule No. 12.1.7 below. For receivables associated with EGS sales to all other customers, the Company shall reimburse the EGS within 14 days of receipt of payment for all energy charges, late fees, sales taxes, and any other taxes and charges collected on behalf of the EGS from the customer consistent with Section 2807 (c) (3) of the Competition Act. For eligible Day-Ahead Hourly Price Service customers defined in Rule No. 5.2.8 that have an off-cycle switch, the Company will allocate any customer underpayment with respect to supply charges attributable to multiple Electricity Providers based on the percentage owed to each.

12.1.6 EGS BILLING DATA The EGS shall provide all necessary data in its possession for the timely computation of bills. A failure of the EGS to provide necessary data to the Company in a timely fashion may delay generation of a bill for the month to which the data pertains. In such instances, the EGS is responsible for all fines and violations, if any, arising as a consequence of the Company's inability to render a timely bill.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM Duquesne will purchase the accounts receivable, without recourse, associated with EGS sales of retail electric commodity, comprised of generation and transmission services, to residential customers and commercial and industrial (“C&I”) customers with monthly metered demand less than 300 kW within Duquesne’s service territory. Eligible customers are those customers taking delivery service under the Company’s retail tariff Rate RS, RH, RA, GS/GM and GMH, and who purchase their electric commodity requirements from the EGS through consolidated billing with the Company. Commercial and industrial customers will be separated into two categories for purposes of the Purchase Price Discount discussed in Section 12.1.7.2. Small C&I customers will be those customers with monthly metered demand less than 25 kW and Medium C&I customers will be those customers with monthly metered demand equal to or greater than 25 kW. The classification of customers as less than or equal to or greater than 25 kW is discussed in detail in the Company’s retail tariff Rate GS/GM and Rate GMH. Under the POR program, Duquesne will reimburse EGSs for their customer billings regardless of whether Duquesne receives payment from the customer, subject to the limitations set forth below. Duquesne will seek to recover the EGS receivables from EGS customers consistent with Duquesne’s existing collection procedures for recovery of billings to default service customers, and incur any uncollectible costs related to billings for EGSs. The term of the POR program defined herein will become effective June 1, 2017²¹, and will remain in effect as described and will terminate on May 31, 2024⁵.

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12.1.7.1 ELIGIBILITY REQUIREMENTS EGSs that choose Duquesne’s consolidated billing option for all or a portion of their eligible customer accounts will be required to sell their accounts receivable to Duquesne for those customers for whom Duquesne issues a consolidated bill. (EGSs may continue to issue their own bills through [dDual bBilling] for commodity service, for all or a portion of their customers, but will not be eligible to participate in the POR program for those customers that receive dDual bBilling.) EGSs may choose to participate in the POR program with consolidated billing at any time during the term of the POR program as long as the EGS does not remove customer accounts from consolidated billing. A customer whose service is terminated or who voluntarily switches from the EGS’ service to another generation provider is not considered to have been removed by the EGS from consolidated billing and the POR program.

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EGSs participating in this POR program will agree not to reject for enrollment a new customer covered by the program based on credit-related issues. Any customer who wishes to be served by an EGS participating in the POR program will be accepted by the EGS if that EGS is actively serving the rate class to which that customer belongs.

12.1.7.2 PURCHASE PRICE DISCOUNT Participating EGSs’ applicable electric commodity receivables will be purchased at a discount. The discount rate will be 0.10% for incremental, ongoing operating and administrative expenses associated with the POR Program related to these customers.

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(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM – (Continued)

12.1.7.2.2 PURCHASE PRICE DISCOUNT ADJUSTMENT FOR INDIVIDUAL EGS Duquesne will monitor individual EGS uncollectible percentage rates (measured as any unpaid amounts sixty (60) days or older divided by that EGS's total annual consolidated billings), to determine whether any individual EGS is engaging in ~~Unusual Business Behavior~~ practice that results in an increase to the total uncollectible percentage rate for the Duquesne System. If, based on this monitoring, Duquesne finds that an individual EGS's uncollectible percentage rate exceeds 5%, then Duquesne, at its discretion, may increase the discount rate for that individual EGS's accounts to reflect the increased costs associated with the EGS's uncollectible accounts by the difference between the EGS's uncollectible percentage rate and two percent (2%). For purposes of this calculation, Duquesne shall rely on the most recent twelve (12) month period (or shorter if the EGS is new to the POR program) to calculate the EGS's uncollectible percentage rate. Duquesne, in its discretion, may opt to waive the imposition of the additional discount if the increase in the uncollectible rate results primarily from providing service to previously poor paying customers currently on default service and the individual EGS is able to provide a reasonable explanation for the significant increase in its uncollectible rate is not the result of a particular price offering, marketing strategy or other actions of the individual EGS. If, however, Duquesne determines that the EGS may challenge that determination pursuant to the dispute resolution procedures discussed below. Should the result of those procedures uphold the EGS's position, Duquesne will refund to the EGS the additional discount withheld from their receivables. In the course of the dispute resolution, the EGS may be called upon to provide customer payment history for the customers it serves, commodity pricing, and other such information deemed appropriate, subject to confidentiality agreement. The discount will be lowered to the level applicable to other EGSs when and if the particular EGS's uncollectible percentage rate decreases to a level of two percent (2%) or below over a twelve (12) month period. If the particular EGS stops providing service to a customer under the POR program, the EGS must pay to Duquesne an amount equal to the increase to the discount multiplied by that customer's prior year's billings, to the extent that such amount has not already been paid on the date the EGS stops providing service to that customer.

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12.1.7.3 TIMING OF PAYMENTS Payments to EGSs will occur electronically; thirty-five (35) days after consolidated bills are issued, and will continue throughout the billing cycle. If the thirty-fifth (35th) day falls on a weekend, Duquesne Light holiday or bank holiday, payments will occur on the next business day.

12.1.7.4 OTHER PAYMENT PROVISIONS If the EGS customer is on consolidated rate ready billing or consolidated rate ready billing and Duquesne's budget payment plan, Duquesne shall purchase the actual amount owed each month by the customer and payments to EGSs shall be made based on the actual amount owed. If the EGS customer is on consolidated bill ready billing ~~or consolidated bill ready billing and Duquesne's budget payment plan~~, Duquesne shall purchase the amount sent in the bill ready 810 EDI transaction and payments to EGSs shall be made based on the amount in the bill ready 810. Duquesne shall also purchase accounts receivable of EGS's customers based upon an estimated bill. Duquesne shall add to or deduct from any payments due to EGSs amounts that may result from reconciliations, estimated readings, cancel and re-bills, or any applicable billing adjustment. Notwithstanding the foregoing, Duquesne shall only be obligated to purchase the monthly budget amount and remit to the EGS any adjusted budget billing amount until Duquesne implements any necessary changes to its billing system to allow for the payment of the actual amount owed by the customer.

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12.1.7.5 TRANSFER OF COLLECTION RESPONSIBILITIES AND RIGHTS Under the POR program, Duquesne is entitled to receive and retain all payments from customers. Duquesne is authorized to conduct collection activities and, if necessary, terminate its delivery service and EGS commodity service to customers whose accounts receivables were purchased and who fail to make payment of amounts due on the consolidated bill, including the amount of the purchased EGS receivables. Any such termination of service shall be in accordance with the

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM – (Continued)

12.1.7.5 TRANSFER OF COLLECTION RESPONSIBILITIES AND RIGHTS - (Continued)

service termination provisions contained herewith and consistent with the provisions of Chapter 14 of the Pennsylvania Public Utility Code and Chapter 56 (or a successor chapter) of the Commission's regulations. Duquesne shall be authorized to terminate commodity service to an EGS customer if the customer's payments do not cover the amount billed by the Company. A residential customer terminated from utility service under the POR program may be reconnected to service upon the payment of the arrears that were subject to the termination. The required payment may include both delivery and EGS commodity charges.

An EGS customer in the POR program that has been terminated for non-payment may be reconnected upon paying the sum of unpaid distribution charges (plus any applicable reconnection fees or deposits) and the amount billed for EGS commodity service or a payment arrangement at the Company's sole discretion or as required by applicable law. At the time of reconnection, the customer will be reconnected to the EGS or the default service provider of record.

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12.1.7.6 DISPUTE RESOLUTION To the extent concerns arise regarding the implementation of the provisions of the POR program, parties shall attempt to resolve such disputes according to the informal, internal and/or external dispute resolution procedures described in this tariff at Rule No. 18 – Alternative Dispute Resolution. Parties shall also have the right to resolve such disagreements in the Commission's dispute resolution process.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING - (Continued)

12.2 EGS PAYMENT OF OBLIGATIONS TO THE COMPANY An EGS shall pay all Coordination Services Charges or any other charge it incurs hereunder in accordance with the following provisions:

12.2.1 BILLING PROCEDURE Each month, the Company shall submit an invoice to the EGS for all Coordination Services Charges provided under this tariff. The invoice may be transmitted to the EGS by any reasonable method requested by the EGS. An EGS shall make payment for charges incurred on or before the due date shown on the bill. The due date shall be determined by the Company and shall not be less than fifteen (15) days from the date of transmittal of the bill.

12.2.2 BILLING CORRECTIONS AND ESTIMATED BILLINGS Notwithstanding anything stated herein: (1) bills shall be subject to adjustment for any errors in arithmetic, computation, meter readings, estimating or other errors for a period for ~~six-four (64) months~~ six (6) months years from the date of such original monthly billing and (2) the Company shall be entitled to submit estimated bills (subject to correction) in the event the EGS fails to supply necessary information in a timely fashion or other circumstances limit the timely availability of necessary data. (C)

12.2.3 MANNER OF PAYMENT The EGS may make payments of funds payable to the Company by wire transfer to a bank designated by the Company. The Company may require that an EGS that is not creditworthy tender payment by means of a certified or cashier's check, or by wire transfer, or other immediately available funds. If disputes arise regarding an EGS bill, the EGS must pay the undisputed portion of disputed bills under investigation. All payments shall be in United States dollars.

12.2.4 LATE FEE FOR UNPAID BALANCES If payment is made to the Company after the due date shown on the bill, a late fee will be added to the unpaid balance until the entire bill is paid. This late fee will be 1.5% per month on the unpaid balance.

12.2.5 EGS DEFAULT In the event the EGS fails to make payment to the Company on or before the due date as described above, and such failure of payment is not corrected within thirty (30) calendar days after the Company notifies the EGS to cure such failure, the EGS shall be deemed to be delinquent. In the event of a billing dispute between the Company and the EGS, the Company will continue to provide service pursuant to the Individual Coordination Agreement and the tariff as long as the EGS continues to make all payments not in dispute. A billing dispute shall be dealt with promptly in accordance with the dispute resolution procedures set forth below in Rule 18.

12.2.5.1 EGS OFFSET In the event an EGS is deemed to be delinquent under 12.2.5, the Company, may, at its sole discretion, reduce the reimbursement to the EGS for amounts collected by the Company by the amount owed to the Company. (C)

12.3 BILLING FOR SUPPLIER OBLIGATIONS TO OTHER PARTIES The Company will assume no responsibility for billing between an EGS and any energy source, or a Scheduling Coordinator and any Coordinated Suppliers.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

13. WITHDRAWAL BY EGS FROM RETAIL SERVICE

13.1 NOTICE OF WITHDRAWAL TO THE COMPANY An EGS shall provide electronic notice to the Company of withdrawal by the EGS from retail service in accordance with the Pennsylvania Public Utility Commission's rulings in Docket No. 00960890F.0013, and any subsequent applicable Pennsylvania Public Utility Commission rulings.

13.2 NOTICE TO CUSTOMERS An EGS shall provide notice to its customers of withdrawal by the EGS from retail service in accordance with the Pennsylvania Public Utility Commission's rulings in Docket No. 00960890F.0013 and any subsequent applicable Pennsylvania Public Utility Commission rulings. The EGS shall provide a copy of the form of such notice to the Company.

(C)

13.3 COSTS FOR NONCOMPLIANCE An EGS that withdraws from retail service and fails to provide at least ninety (90) days written notice of said withdrawal shall reimburse the Company for any of the following costs associated with the withdrawal:

- A. Mailings by the Company to the EGS's customers to inform them of the withdrawal and their options;
- B. Non-standard/manual bill calculation and production performed by the Company;
- C. EGS data transfer responsibilities that must be performed by the Company; and
- D. Charges or penalties imposed on the Company by third parties resulting from EGS non-performance.

(C) – Indicates Change

RULES AND REGULATIONS - (Continued)

14. DISCONTINUANCE OF EGS SERVICE TO PARTICULAR CUSTOMERS

14.1 NOTICE OF DISCONTINUANCE TO THE COMPANY An EGS shall provide electronic notice to the Company of all intended discontinuances of service to customers in accordance with applicable Pennsylvania Public Utility Commission rules.

14.2 NOTICE TO CUSTOMERS An EGS shall provide a minimum of ninety (90) days advance notice to any customer it intends to stop serving of such intended discontinuance in a manner consistent with the Pennsylvania Public Utility Commission's rulings in Docket Nos. L-00970126 and M-00960890 and any subsequent applicable Pennsylvania Public Utility Commission rulings. The application of this Rule No. 14.2 will, however, be limited to the classes of customers to which the referenced Pennsylvania Public Utility Commission rulings will apply. With respect to all other classes of customers, it will be the EGS's responsibility to provide notice to a customer of its intention to discontinue service in accordance with the EGS's contractual obligations with the customer.

14.3 INTENTIONALLY LEFT BLANK

14.4 CUSTOMERS RETURNING TO DEFAULT SERVICE An EGS shall give the customer and Duquesne at least (ninety) 90 days notice prior to the meter read date on which the EGS has a reasonable expectation that it will no longer be serving the customer, whether due to termination of a contract or pursuant to the terms of its contract. EGSs shall not utilize the flexibility afforded by these rules to propose price changes that are designed to economically force customers to return to default service during the Summer period. If an EGS has a reasonable expectation that it will no longer be serving a customer as of a meter read date, the EGS shall issue the notice required by the previous sentence within five (5) business days of determination, and such customers shall have a minimum of sixty (60) days in which to make the choices outlined in Section 45.2 of Duquesne's retail tariff, as appropriate. For Duquesne's purposes, this ninety (90) day notice to Duquesne is for informational and planning purposes only.

14.4.1 CUSTOMER MUST INITIATE THE SWITCH TO DEFAULT SERVICE The Company will accommodate requests by customers to switch EGSs in accordance with 52 Pa. Code Chapter 57, Subchapter M "Standards for Changing a Customer's Electricity Generation Supplier." Customers who elect to return to default service from an EGS will return at the charges of the applicable tariff rate schedule and a customer may return to default service in accordance with the switching protocols contained in the Retail Tariff by requesting the same from the Company. Switching by customers shall occur in accordance with the direct access procedures, and in accordance with the provisions contained in this tariff and the Company's retail tariff. No customer will be returned to default service for any reason without authorization by that customer, except as follows: the Company will permit a customer to return to default service in a switch initiated by the customer's EGS through standard EDI procedures in the following circumstances: (1) the complete abandonment of service in the Company's service territory by the customer's EGS; (2) to remedy a case of inadvertent-slamming of the customer; and (3) the expiration of the term of the customer's contract with the EGS, provided that the customer's contract with the EGS is a standard one commonly used by the EGS to provide service to other customers with similar service requirements and the expiration dates of the contract are not otherwise designed to game supply around default service rates by returning the customer to default service when wholesale energy prices have increased and EGS service to the customer has become uneconomic; or (4) as required under the Company's shopping program, if any, for customers participating in the Company's Customer Assistance Program.

(C)

(C)

(C) - Indicates Change

RULES AND REGULATIONS - (Continued)

15. LIABILITY

15.1 GENERAL LIMITATION ON LIABILITY The Company shall have no duty or liability with respect to electric energy before it is delivered by an EGS to a point of delivery on the Company's distribution system. After its receipt of electric energy and capacity at the point of delivery, the Company shall have the same duty and liability for distribution service to customers receiving Competitive Energy Supply as to those receiving electric energy and capacity from the Company.

15.2 LIMITATION ON LIABILITY FOR SERVICE INTERRUPTIONS AND VARIATIONS The Company does not guarantee continuous, regular and uninterrupted supply of service. The Company may, without liability, interrupt or limit the supply of service for the purpose of making repairs, changes, or improvements in any part of its system for the general good of the service or the safety of the public or for the purpose of preventing or limiting any actual or threatened instability or disturbance of the system. The Company is also not liable for any damages due to accident, strike, storm, riot, fire, flood, legal process, state or municipal interference, or any other cause beyond the Company's control.

15.3 ADDITIONAL LIMITATIONS ON LIABILITY IN CONNECTION WITH DIRECT ACCESS Other than its duty to deliver electric energy and capacity, the Company shall have no duty or liability to an EGS providing Competitive Energy Supply arising out of or related to a contract or other relationship between an EGS and a customer of the EGS.

The Company shall implement customer selection of an EGS consistent with applicable rules of the Commission and shall have no liability to an EGS providing Competitive Energy Supply arising out of or related to switching EGSs, unless the Company is negligent in switching or failing to switch a customer.

15.4 TAX INDEMNIFICATION If Duquesne Light Company becomes liable under Section 2806(g) or 2809(c) of the Public Utility Code, 66 Pa. C.S. §§ 2806(g) and 2809(cf), for Pennsylvania state taxes not paid by an EGS, the non-compliant EGS shall indemnify Duquesne for the amount of additional state tax liability imposed upon Duquesne by the Pennsylvania Department of Revenue due to the failure of the EGS to pay or remit to the Commonwealth the tax imposed on its gross receipts under Section 1101 of the Tax Report Code of 1971 or Chapter 28 as noted above.

(C)

(C) – Indicates Change

LOAD DATA SUPPLY CHARGE

AVAILABILITY/APPLICABILITY

The Company will fulfill a customer's or its authorized representative's request for customer load information available on its information system. The Company will provide customer load information, with customer consent, only to EGSs or other customer-authorized representatives, for up to five (5) requests for the same account in a calendar year at no charge after which subsequent requests will be charged according to the Table of Charges. The Company will provide customer load information on a 15 or 60-minute interval basis as specified by the customer, EGS or other customer-authorized representative.

TABLE OF CHARGES

An EGS or other customer-authorized representative must pay the charges stated below:

If the Company has already provided load data to a customer or its authorized representative five (5) times for the same account in a calendar year, the customer will be charged for subsequent requests in that year at \$60 per request.

CONDITIONS

No customer-specific information will be supplied to an EGS or other representative of the customer before the Company's receipt of a customer's written authorization to release such data to such EGS or other representative.

EGSs who qualify as creditworthy as those terms are defined in this tariff will be billed for each request pursuant to the procedure identified in Rule No. 12.2.1 of this tariff. Payment by an EGS who does not qualify as creditworthy or has bad credit as those terms are defined in this tariff must be made before release of information.

METHOD OF PAYMENT

There are two (2) methods of payment:

A check made payable to Duquesne Light Company and sent to:

Duquesne Light Company
Attn: Supplier Service Center
411 Seventh Avenue
14th Floor, MD 14-1(MD: 6-4)
Pittsburgh, PA 15219

(C)

or through a wire/ACH transfer to per Company instructions.:

(C)

Bank Name: Mellon Bank, Pittsburgh
ABA: 043000264
Account No: 000-8064
Acct Name: Duquesne Light Company

(C)

(C) - Indicates Change

STANDARD OFFER PROGRAM COST RECOVERY

BACKGROUND

~~In compliance with Commission Order dated July 16, 2013, at Docket No. P-2012-2301664, The Company's implemented a Standard Offer Program ("SOP") is implemented pursuant to Commission Order dated XXXXXXXX XX, XXXX, at Docket No. P-2020-XXXXXXX. Under the SOP, EGSs can submit applications agreeing to become SOP Suppliers and provide a Standard Offer that is a fixed price product seven percent (7%) lower than Duquesne Light's Price to Compare ("PTC"), in effect at the time of the offer, for a twelve month (12-month) period. Complete SOP rules and documentation may be found at <http://supplier.customer-choice.com>.~~ (C)

SUPPLIER CHARGES

As approved by the Commission in the proceeding at Docket No. ~~P-2020-XXXXXXX~~P-2012-2301664, the Company will charge each SOP Supplier a Customer Acquisition Fee that will be applied to the number of EDI transactions submitted by the SOP Supplier to Duquesne Light. (C)

CUSTOMER ACQUISITION FEE

The Customer Acquisition Fee for each EDI transaction submitted will be ~~\$40.2830.00~~. (C)

BILLING AND PAYMENT

The Company will bill the participating SOP Suppliers on a monthly basis. All charges are due and payable within 30 days. There are two methods of payment:

A check made payable to Duquesne Light Company and mailed to:

Duquesne Light Company
Attn: Supplier Service Center
411 Seventh Avenue (MD: 15-1)
14th Floor, MD 14-1
Pittsburgh, PA 15219

or through a wire/ACH transfer to:

Bank Name: ~~Mellon Bank, Pittsburgh~~
ABA: ~~043000264~~
Account No: ~~000-8061~~
Acct Name: ~~Duquesne Light Company~~per Company instructions. (C)

If an SOP Supplier fails to make the required payment, Duquesne Light may reduce the amount due to that SOP Supplier from that SOP Supplier's next Purchase of Receivable ("POR") payment by the SOP amount due (but not from amounts that are subject to a bona fide POR payment dispute).

(C) – Indicates Change

TABLE 1

Real Power Distribution Losses

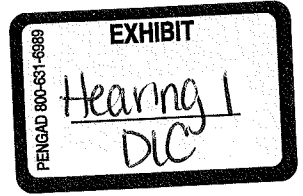
Rate Schedule	Percentage of Loss
AL - Architectural Lighting Service	6.1%
GL - General Service Large	2.9%
GLH - General Service Large Heating	2.9%
GMH - General Service Medium Heating	5.3%
GS/GM - General Service Small and Medium	5.3%
HVPS - High Voltage Power Service	0
L - Large Power Service < 138 Kv	2.9%
L - Large Power Service ≥ 138 Kv	0
RA - Residential Service Add On Heat Pump	6.1%
RH - Residential Service Heating	6.1%
RS - Residential Service	6.1%
SE - Street Lighting Energy	6.1%
SH - Street Lighting Highway	6.1%
SM - Street Light Municipal	6.1%
UMS - Unmetered Service MTS - Municipal Traffic Signals	5.3% 6.1%
PAL - Private Area Lighting	6.1%

(C)

(C)

(C)

(C) – Indicates Change



DLC HEARING EXHIBIT 1



Michael Zimmerman
Senior Counsel, Regulatory

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Mail drop 15-7
Pittsburgh, PA 15219

Tel: 412-393-6268
mzimmerman@duqlight.com

April 20, 2020

Via Electronic Filing

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

**Re: Petition of Duquesne Light Company For Approval of Default Service Plan For The Period
June 1, 2021 Through May 31, 2025
Docket No. P-2020-_____**

Dear Secretary Chiavetta:

Enclosed for filing on behalf of Duquesne Light Company ("Duquesne Light" or the "Company"), please find the *Petition of Duquesne Light Company For Approval of Default Service Plan For The Period June 1, 2021 Through May 31, 2025* ("Default Service Plan"). To facilitate approval, the Company has filed its direct testimony with the Default Service Plan and respectfully requests that the Pennsylvania Public Utility Commission ("Commission") assign this matter to the Office of Administrative Law Judge for evidentiary hearings and the issuance of a Recommended Decision.

Please enter the appearances of the following attorneys on behalf of the Company in this proceeding:

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Michael Zimmerman (ID # 323715)
Emily Farah (ID # 322559)
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Please send copies of all documents and communications in this proceeding to the counsel listed above.



As indicated on the attached Certificate of Service, Duquesne Light is serving this Petition on the Bureau of Investigation & Enforcements, the Office of Consumer Advocate, the Office of Small Business Advocate, and PJM Interconnection, LLC. Duquesne Light is also serving all active parties in the Company's prior default service proceeding, *Petition of Duquesne Light Company for Approval of Default Service Plan For The Period June 1, 2017 Through May 31, 2021*, at Docket No. P-2016-2543140. Due to the high number of electric generation suppliers ("EGS") licensed in the Company's service territory, EGSs that did not participate in Duquesne Light's last default service proceeding are being served with a copy of this filing letter and the attached Certificate of Service only.

Also as indicated on the attached Certificate of Service, consistent with the Commission's Emergency Order entered March 20, 2020, at Docket No. M-2020-3019262, the Company is effecting service via electronic mail only. A complete copy of the filing will be available on the Company's website at <http://www.customer-choice.com>. In addition, the Company will provide a hard copy of the filing to any entity identified on the Certificate of Service upon request. Requests for a hard copy should be directed to Mr. Kanagy at akanagy@postschell.com.

Should you have any questions, please do not hesitate to contact me.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Michael Zimmerman", is written over a light blue horizontal line.

Michael Zimmerman
Senior Counsel, Regulatory

Enclosures

Cc: Certificate of Service
Gladys Brown Dutrieuille, Chairman
David W. Sweet, Vice Chairman
John F. Coleman, Commissioner
Ralph V. Yanora, Commissioner

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant) and the Pennsylvania Public Utility Commission's March 20, 2020 Emergency Order at Docket No. M-2020-3019262:

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Date: April 20, 2020

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition Of Duquesne Light Company :
For Approval Of Default Service Plan : **Docket No. P-2020-_____**
For The Period June 1, 2021 Through :
May 31, 2025 :

**PETITION OF DUQUESNE LIGHT COMPANY
FOR APPROVAL OF A DEFAULT SERVICE PLAN**

Pursuant to 66 Pa. C.S. § 2807(e) and the Pennsylvania Public Utility Commission’s (“Commission”) default service regulations at 52 Pa. Code §§ 54.181-54.189, Duquesne Light Company (“Duquesne Light” or the “Company”) hereby petitions the Commission for approval of its default service plan for the period from June 1, 2021 through May 31, 2025 (“DSP IX,” “Default Service Plan,” or “Plan”), as well as approval of the Company’s: 1) Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”), 2) Long-Term Solar Power Purchase Agreement (“Solar PPA”) Plan, 3) Standard Offer Program (“SOP”), 4) Customer Assistance Program (“CAP”) Shopping Program, 5) proposal to recover cash out payments to customer generators and other approvals described herein required for the implementation of the Plan.

A. BACKGROUND

1. Duquesne Light has implemented eight (8) successful default service programs helping to create one of the most competitive shopping environments in the Commonwealth, while providing default service at rates and terms that meet the requirements of the Public Utility Code. With each successive plan, Duquesne Light has tailored its default service offerings to ensure appropriate levels of price stability for customers at market reflective rates, while supporting the competitive retail electricity market. In its DSP IX proposal, Duquesne Light seeks to enhance its current default service program and continue to promote competition for its customers.

2. Chapter 28, Section 2807(e) of the Public Utility Code (Code), 66 Pa. C.S. §

2807(e), provides the statutory requirements for a default service plan. Chapter 28 requires the default service provider to follow a Commission-approved competitive procurement plan that includes auctions, requests for proposals, and/or bilateral agreements, as well as a prudent mix of spot market purchases, short-term contracts, and long-term purchase contracts designed to ensure adequate and reliable service at the least cost to customers over time. 66 Pa. C.S. § 2807(e). Additionally, the Commission's default service regulations at 52 Pa. Code §§ 54.181-54.189 which were modified in a *Final Rulemaking Order* entered on October 4, 2011¹ and the *Default Service End-State Order*² provide guidance regarding the Commission's requirements for default service plans. Additional guidance from the Commission was recently provided in a Secretarial Letter dated January 23, 2020. *Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms*, Docket M-2019-3007101, January 23, 2020 ("*January 2020 Secretarial Letter*").

3. The Company's proposed Default Service Plan satisfies these statutory and regulatory requirements through the competitive procurement of electric supply tailored to meet the individual characteristics of each customer class, by creating a transparent, competitive market and at the same time ensuring appropriate consumer protections. The Company's Default Service Plan recognizes that each customer class has different characteristics and different levels of experience with the competitive market. The Plan takes these differences into account and proposes procurement methodologies for each of the major customer groups that reflect these considerations. The Company's Plan also continues to support Pennsylvania retail markets with enhancements to its SOP enrollment processes and its CAP customer shopping proposal. In

¹ *Final Rulemaking Order*, Docket No. L-2009-2095604 (Order entered October 4, 2011).

² *Investigation of Pennsylvania's Retail Electricity Market: End State of Default Service*, Docket No. I-2011-2237952, Order entered February 15, 2013 ("*Default Service End-State Order*").

developing this Plan, the Company also considered the approaches that have worked in previous default service plans; the current desires and concerns of parties, customers and retail suppliers; and the Commission's rules and policies.

4. The Company's Default Service Plan satisfies the applicable legal requirements by providing for the availability of adequate, reliable, affordable, efficient and environmentally sustainable electric service at the least cost over time and consideration of the impact to the environment. A summary of Duquesne Light's Default Service Plan is set forth below, with additional details provided in the testimony and exhibits accompanying this Petition.

B. PROGRAM TERM

5. The term lengths of Duquesne Light's current DSP VIII program, as well as the current default service programs for all of the other the major electric distribution companies, are for a four year period.

6. Duquesne Light proposes that the term length of the DSP IX Plan also be for a period of four years, from June 1, 2021 through May 31, 2025. The four-year term saves litigation time and cost for Duquesne Light, other parties that participate in DSP proceedings and the Commission, as compared to prior default service plans with two-year term periods.

C. PROPOSED DEFAULT SERVICE PROCUREMENT PLANS AND RATES

7. The DSP IX Plan largely continues the procurement approaches and rate terms that are currently in effect under DSP VIII. The DSP IX Plan includes a portfolio of four (4) separate supply plans tailored to meet the specific needs of major customer groups, which are: 1) Residential and Lighting ("Residential & Lighting"), 2) Small Commercial & Industrial ("Small C&I"), 3) Medium Commercial & Industrial customers under 200 kW ("Medium C&I <200kW"), and 4) Hourly Price Service ("HPS") for Medium C&I customers with monthly metered demand equal to or greater than 200 kW and Large Commercial & Industrial ("Large

C&I”) customers (collectively (“HPS-Eligible”).

Residential and Lighting Customers

8. Default Service for Residential & Lighting customers will continue to consist of a combination of twelve (12) and twenty-four (24) month fixed-price full requirements (“FPFR”) supply contracts obtained through semi-annual competitive auctions with overlapping, or “laddered,” delivery periods. The full requirements contracts require supplier(s) to provide energy, capacity, ancillary services, and any other services or products necessary to serve a specified percentage of default service load 24 hours a day, for the term of the contract. Because the contract is “load-following,” the amount of energy and other services and products a supplier must provide will vary depending upon Duquesne Light’s actual default service load. The supply contracts that Duquesne Light has proposed for Residential & Lighting customers require the suppliers to satisfy this obligation at the prices that they bid in the respective auctions. The procurement methodology is discussed in more detail in the testimony of Mr. Peoples in Duquesne Light St. No. 2.

9. The Company also proposes to continue to change the default service supply rates for these customers every six months as in DSP VIII.

10. The proposed mix of one-year and two-year FPFR products and the semi-annual overlapping of their delivery periods provide Residential & Lighting customers greater price stability than shorter term procurements and rate changes, which is reasonable and appropriate for this customer class. This is discussed in more detail in the testimony of Mr. Fisher in Duquesne Light St. No. 3.

11. Duquesne Light proposes to procure four (4) FPFR supply contracts for the Residential & Lighting class with delivery periods that extend beyond the end of the DSP IX

period, otherwise known as “overhang” contracts. Overhang contracts are appropriate customer protections that help avoid the potential price shock that may occur when 100% of supply must be procured at one time or over a short period of time. The Company’s DSP VI, DSP VII and DSP VIII plans also included overhanging supply contracts for Residential & Lighting and Small C&I customers.³ Exhibit JP-1, which is attached to Duquesne Light Statement No. 2, shows the proposed procurement schedule and delivery period for Residential & Lighting customers.⁴

12. Additionally, Duquesne Light proposes to continue semi-annual reconciliation of Residential & Lighting procurement group default service costs and revenues along with semi-annual rate changes. The Company recognizes that the Commission's regulations provide for quarterly rate changes for Residential customers. See 52 Pa. Code § 54.187. However, Duquesne Light does not believe that quarterly rate changes are necessary for Residential & Lighting customers because the Company is proposing to acquire default service supply for these customers in the form of twelve (12) and twenty-four (24) month fixed-price full requirements contracts.

³ See *Petition of Duquesne Light Company for Approval of Revisions to its Approved Default Service Plan VI*, Docket No. P-2012-2301664 (Order entered September 11, 2014) (permitting Duquesne Light to extend contracts that overlap into DSP VII). See also *Petition of Duquesne Light Company for Approval of Default Service Plan for the Period June 1, 2015 Through May 31, 2017*, Docket No. P-2014-2418242 (Order entered January 15, 2015); *Petition of Duquesne Light Company for Approval of Default Service Plan for the Period June 1, 2017 Through May 31, 2021*, Docket No. P-2016-2543140 (Order entered December 22, 2016) (approving proposed DSPs that provided for supply contracts that would extend into the subsequent DSP).

⁴ On April 8, 2020, the Company filed a Petition at its DSP VIII proceeding, Docket P-2016-2543140, proposing to modify its DSP VIII procurement schedule with regard to the 2022/2023 PJM planning year. *Petition of Duquesne Light Company for Approval to Modify the Procurement Schedule for its Default Service Plan for the Period June 1, 2017, through May 31, 2021*. In the Petition, the Company proposes to modify the duration of certain default service supply contracts to be procured in its September 2020 auction from 24 months to 12 months, which will cover the period of December 2020 through November 2021. As the Petition explains, the purpose of this proposed truncation is to avoid inclusion of the 2022/2023 PJM planning year in the products to be procured in the September 2020 auction, because the PJM capacity price for that planning year may not be established by the time the auction occurs. The Company’s proposal, if approved by the Commission, would cause a portion of load for the overhang period into DSP IX (covering the period from December 1, 2021 through November 30, 2022) not to be procured through the DSP VIII Plan. In such event, the Company would instead procure default service supply for this period as part of its DSP IX auction schedule, when presumably the capacity prices will be known.

Fixed-price full requirements contracts greatly diminish cost over/under-recoveries that are associated with other procurement methods, and therefore do not require more frequent rate resets in order to reconcile costs. The Commission approved semi-annual reconciliation for Duquesne Light's Residential & Lighting customers in the DSP VI proceeding. *DSP VI Order*, p. 210. In DSP VII and DSP VIII, semi-annual reconciliation was approved as part of the Settlement Stipulations. Duquesne Light therefore requests a waiver of Section 54.187 to the extent necessary to implement its proposed plan.

13. Supply for the Lighting customers' default service load will continue to be combined with the default service supply for Residential customers. Wholesale suppliers will bid a single price to supply both Residential and Lighting customers' default service load. Separate rates will be developed by Duquesne Light for Residential and Lighting customers to reflect the lower market cost of supplying the applicable Lighting customer classes. The methodology for developing Lighting rates is generally the same as that approved by the Commission in DSP VII and VIII and is described by Mr. Ogden in Duquesne Light St. No. 4.

14. The auctions for Residential & Lighting customers will be conducted by Duquesne Light, with an independent monitor. The Company proposes to maintain the 50% supplier load cap to serve Residential & Lighting (and Small C&I) customers in a given auction equal to 50% of the number of tranches solicited on that auction date, rounded up to the nearest integer number of tranches.

15. In the *Default Service End-State Order*, the Commission directed the establishment of a working group, in part, to develop an industry standard default service Supply Master Agreement ("SMA") for EDCs in Pennsylvania. The Company is proposing to continue to use the SMA template that was developed by the Procurement Collaboration Working Group, with a few

updates, for its wholesale power procurements under DSP IX. A copy of the Supply Master Agreement is attached to Duquesne Light Statement No. 2, the testimony of Mr. John Peoples, as Exhibit JP-3.

Small C&I Customers

16. Default Service for Small C&I customers, which are customers with monthly metered demands less than 25 kW, will be supplied in the same manner as Residential & Lighting customers, which consists of a combination of twelve (12) and twenty-four (24) month full requirements supply contracts obtained through semi-annual competitive auctions with overlapping, or “laddered,” delivery periods. The procurement schedule and delivery periods for Small C&I customers are also provided in Exhibit JP-1, which is attached to Mr. Peoples’ testimony.

17. Similar to its procurement plan for Residential & Lighting customers, Duquesne Light’s procurement plan for Small C&I customers is designed to provide additional rate stability for customers. In the *Petition of Duquesne Light Company for Approval of a Default Service Program for the Period from June 1, 2015 through May 31, 2017*, Docket No. P-2014-2418242 (Opinion and Order entered January 15, 2015), the Commission stated at p. 25, “... Duquesne’s proposal should be accepted in order that the Small C&I customer class procurement would be similar to the default service procurement for the Residential class in DSP VII. As Duquesne has explained, these classes exhibit similar characteristics and the proposed default service procurement plans for these classes represent a balancing of the importance of rate stability and market responsive rates for these smaller customers.”

18. Rates for Small C&I customers will be reset twice per year, and Duquesne Light

proposes to continue to reconcile costs for these customers on a semi-annual basis. The Commission first approved semi-annual reconciliation for Duquesne Light's Small C&I customers in the DSP VI proceeding. *DSP VI Order*, p. 210.

19. As with Residential & Lighting customers, Duquesne Light recognizes that the Commission's regulations provide for quarterly rate changes for Small C&I customers. 52 Pa. Code § 54.187. However, the Company does not believe that quarterly rate changes will be necessary for Small C&I customers because the Company is proposing to acquire default service supply for these customers in the form of twelve (12) and twenty-four (24) month fixed-price full requirements contracts. As explained above, fixed price full requirements contracts greatly diminish cost over/under- recoveries that are associated with other procurement methods, and therefore do not require more frequent rate resets in order to reconcile costs. Accordingly, there is no need to reset rates quarterly, and Duquesne Light requests a waiver of the regulation to the extent necessary to implement its proposed plan.

20. Small C&I customers include unmetered C&I customers. The load of unmetered accounts will be included in the Small C&I procurements. Default Service rates for unmetered accounts will be the same as the Small C&I Default Service rates.

21. Duquesne Light also will use the SMA template described above and provided as Exhibit JP-3 for its Small C&I procurements.

Medium C&I Default Service Customers Under 200 kW

22. Default Service for Medium C&I customers with monthly metered demands equal to or greater than 25 kW and less than 200 kW will continue to be supplied by full requirements supply contracts for three-month terms from third-party suppliers with no laddering. The Company's procurement proposal for Medium C&I customers under 200 kW is consistent with

the current Commission approved procurement schedule for these customers under DSP VIII. The procurement schedule and methodology is further explained by Mr. Peoples in Duquesne Light St. No. 2.

23. Rates for Medium C&I customers with demands under 200 kW will be reset quarterly, and Duquesne Light proposes to continue to reconcile costs for these customers on a semi-annual basis.

24. The procurement methodology for Medium C&I customers under 200 kW is appropriately market responsive given the sophistication of this customer class.

25. Default service supply for Medium C&I customers under 200 kW will be split into four equal tranches of 25% of the total Medium C&I <200kW default service load in each hour. Accordingly, the default service rates for these customers will continue to change quarterly, on June 1st, September 1st, December 1st, and March 1st.

26. The Company proposes, as initially approved in DSP VII and continued in DSP VIII, to apply no supplier load cap for the Medium C&I <200kW solicitations. With three-month contracts for Medium C&I <200kW customers, the effect of supplier default is lessened, and there is a reduced need for load caps to guard against the exposure resulting from a large supplier defaulting on its obligation.

27. In the *Default Service End-State Order*, the Commission proposed that customers with demands of 100 kW or greater that have interval meters only be offered hourly LMP products. *Default Service End-State Order*, p. 31. However, the Commission further acknowledged that directing an hourly LMP product for Medium C&I customers may raise legal questions about compliance with the Competition Act and that the Commission preferred to pursue legislative amendments that would provide for such authority before mandating an hourly priced product for

Medium C&I customers. *Id.* at 45. To date, such changes have not been adopted by the General Assembly. Therefore, the Company is not proposing hourly LMP default service prices for Medium C&I customers under 200 kW.

28. Duquesne Light also will use the SMA template described above and provided as Exhibit JP-3 for its procurements for Medium C&I customers under 200 kW.

HPS-Eligible Customers

29. For Medium C&I customers with monthly metered demand equal to or greater than 200 kW and Large C&I customers, Duquesne Light will continue to offer default service rates based on hourly day-ahead PJM energy market prices. Customers also will be charged a pass through of PJM capacity and ancillary services costs as well as the administrative costs of providing HPS. The procurement methodology is discussed in more detail in the testimony of Mr. Peoples in Duquesne Light St. No. 2.

30. The Company recently lowered the threshold for HPS eligibility for Medium C&I customers from ≥ 300 kW to ≥ 200 kW, on June 1, 2019. This relatively recent ≥ 200 kW threshold will be preserved in DSP IX.

31. In order to acquire default service supply for HPS customers, the Company will conduct a solicitation in March of each year for HPS full requirements supply to be delivered over a twelve-month period from June 1st through May 31st. Two tranches will be solicited, with each tranche representing 50% of the default service load. The supplier(s) with the lowest fixed price bids will be selected as the winning supplier(s) of the HPS solicitation. In addition to the winning bid price offered by the supplier, each winning supplier will be paid for its share of the associated energy, capacity, and ancillary service charges billed to HPS customers pursuant to Rider No. 9 in Duquesne Light's Retail Tariff. The winning suppliers' fixed price bids will be designed to

compensate suppliers for the associated alternative energy credit costs, the energy balancing costs associated with day-ahead pricing versus final energy costs, and any other third-party supplier administrative costs of providing HPS. There is no change in this process from the process that was approved for the DSP VIII plan.

32. Duquesne Light will also continue to rely on an independent third party to monitor and conduct the competitive solicitations, including qualifying bidders, conducting bidder information sessions, receiving and evaluating all bids, determining winning bidders, and reporting to the Commission.

33. As of March 2020, 94% of HPS Eligible load was being served by EGSs.

Competitive Procurement Guidelines

34. Duquesne Light proposes to maintain the 50% supplier load cap to serve Residential & Lighting and Small C&I customers in a given auction equal to 50% of the number of tranches solicited in that auction date, rounded up to the nearest integer number of tranches, and seeks the Commission's approval for this provision as part of this proceeding. The Commission approved a 50% supplier load cap in both DSP VII and DSP VIII. Additionally, consistent with DSP VII and DSP VIII, the Company is not proposing a supplier load cap for the Medium C&I <200kW and HPS-Eligible solicitations. The Company believes that supplier load caps for these solicitations are not necessary based on the high levels of shopping and short-term contracts for these customer classes.

35. Duquesne Light will continue to engage an independent third party to assist in qualifying bidders, conducting bidder information sessions, and, importantly, to receive all bids, rank qualifying bids, and determine winning bids for all four procurement groups. All winning bids will be submitted to the Commission for approval prior to award.

36. Within fifteen calendar days from the closing of each solicitation, Duquesne Light will post the weighted average winning bid price on its website and publish an estimated default service rate calculation model on its website that shows the build-up of the auction results into retail default service rates. As explained in the testimony of Mr. Ogden, Duquesne Light Statement No. 4, the Price-To-Compare (“PTC”) will be posted 60 days in advance of each change in default service rates, with the exception of the application periods beginning June 1 of each year.⁵

37. If for any reason an auction fails to attract a sufficient volume of bids or the Commission does not approve the submitted bids or an accepted supplier defaults, Duquesne Light acknowledges that it has the obligation to procure supply to provide such portion of the default service. In this circumstance, Duquesne Light proposes to meet this obligation on an interim basis through purchases in the PJM spot market and requests authority to recover all the costs of such purchases and all reasonable administrative costs from the applicable customer classes. Duquesne Light agrees that it will submit to the Commission, within 15 days after any such occurrence, a contingency plan to handle any default service shortfall.

Act 129 Standards

38. The procurement methodologies under the Default Service Plan are based upon the standards set forth by Act 129 that the procurement plan shall be designed to be “the least cost to consumers over time” and shall include a “prudent mix” of contracts. As explained in the testimony of Mr. Fisher, Duquesne Light St. No. 3, Duquesne Light’s proposed competitive solicitations for

⁵ For the application period beginning June 1 of each year, the Company will not know the transmission component of the PTC until May 15. The Company will post the final supply component of the PTC 60 days in advance of June 1 and will post the final PTC including the transmission component by May 15.

full requirements default service supply contracts of various terms for Residential & Lighting, Small C&I, Medium C&I customers with demands less than 200 kW, and HPS-Eligible customers represent a “prudent mix” of procurement contracts and will provide default service customers with access to an adequate and reliable supply of generation at least cost over time.

39. Specifically, Act 129 requires that power “shall be procured through competitive procurement processes” (including auctions, requests for proposals and/or competitively procured bilateral agreements procured at no greater than the cost of obtaining generation under comparable terms in the wholesale market), and such procurement must be a “prudent mix” of spot market purchases, short-term contracts and long-term purchase contracts. *Id.* at § 2807(e)(3.1)-(3.2).

40. Duquesne Light's Default Service Plan relies upon a prudent mix of contracts. The supply contracts are explained in detail by Mr. Peoples, Duquesne Light St. No. 2. A summary of the products for each class is as follows:

- For Residential & Lighting and Small C&I customers, Duquesne Light will procure default service supply through overlapping twelve-month and twenty four-month full requirements contracts.
- For Medium C&I customers with demands less than 200 kW, Duquesne Light will procure default service supply through three-month full requirements contracts.
- For HPS-Eligible customers (Medium C&I customers with demands equal to or greater than 200 kW and Large C&I customers), Duquesne Light will conduct an auction for third-party suppliers to supply HPS customers' actual hourly usage at the day-ahead hourly energy prices.

41. This mix is a prudent mix of contracts. Duquesne Light has attempted to be mindful of both Act 129, the Default Service Regulations, and Commission Policy in proposing the mixture of contracts for its Default Service Plan, and asserts that this Plan includes a prudent mix of contracts given the current levels of, and experience with, switching for each class of customers, and the competitive market enhancements proposed in the

Petition.

42. This procurement plan also satisfies the requirement that the Plan be designed to be the “least cost to customers over time.” This is discussed in further detail by Mr. Fisher, Duquesne Light St. No. 3.

43. Act 129 also specifies that the Commission shall make a finding that “neither the default service provider nor its affiliated interest has withheld from the market any generation supply in a manner that violates federal law.” 66 Pa. C.S. § 2807(e)(3.7). In his direct testimony, Mr. Peoples’ addresses this requirement with respect to Duquesne Light and its affiliates and demonstrates that the standard will be met under the DSP IX plan.

44. For all of the reasons set forth above, Duquesne Light’s Default Service Plan meets the standards set forth in Act 129, and enables the Commission to make the necessary findings per Section 2807(e)(3.7). Specifically, Duquesne Light requests that the Commission find its Plan includes prudent steps necessary to negotiate favorable generation supply contracts, and to obtain least cost generation supply contracts on a long-term, short-term and spot market basis. Neither Duquesne Light nor its affiliated interest has withheld or will withhold from the market any generation supply in a manner that violates Federal law.

Default Service Procurement Cost Recovery

45. Duquesne Light will continue to fully recover the costs incurred from supply solicitations for Residential & Lighting, Small C&I, Medium C&I customers with demands less than 200 kW, and HPS-Eligible customers, gross receipts taxes, along with the costs of hiring the independent monitor, through fully reconcilable Section 1307(e) cost recovery mechanisms for each class. 66 Pa. C.S. § 1307(e).

46. Additionally, Duquesne Light will continue to recover its administrative costs for

HPS service through a Fixed Retail Administrative Charge (“FRA”). The FRA (expressed in dollars per MWh) included in Rider No. 9 will consist of two components. The first component will be based on the winning bids submitted by third-party suppliers and will compensate the suppliers for their costs associated with alternative energy credits, energy balancing and any other third-party supplier administrative costs of providing HPS. The second component will include the Company’s administrative costs, costs of conducting auctions, and other unbundled costs of preparing the Company’s default service plan filing and working capital costs associated with default service supply.

D. EV-TOU PILOT

47. In the *January 2020 Secretarial Letter*, the Commission noted that EV usage in the future will increase and that TOU rates in the context of EV expansion need to be further explored. The Commission further stated: “Accordingly, we urge all parties participating in the upcoming DSP proceedings to consider how EV specific TOU rate offerings could be made available to consumers.” *January 2020 Secretarial Letter*, pp. 6 – 7.

48. In response to the *January 2020 Secretarial Letter*, Duquesne Light is proposing an EV-TOU Pilot Program.

49. The EV-TOU Pilot Program will be offered to Residential, Small C&I and Medium C&I customers with demands less than 200 kW who own or lease an EV or who operate EV charging infrastructure at the service location. HPS-Eligible, CAP, virtual meter aggregation and budget billing customers will not be eligible for the reasons explained in the testimony of Ms. Scholl in Duquesne Light Statement No. 5.

50. Customers that elect the EV-TOU Pilot Program will be charged different supply rates for Peak, Shoulder and Off-Peak time periods. These time periods are as follows:

Schedule	Time Period
Peak	1 p.m. – 9 p.m.
Shoulder	6 a.m. – 1 p.m. 9 p.m. – 11 p.m.
Off-Peak	11 p.m. – 6 a.m.

51. In order to determine EV-TOU supply rates for each time period, the Company will adjust the adjusted wholesale price for each class using rate class factors that are based in part upon hourly locational marginal prices for energy from 2016 through 2019. The development of the EV-TOU rate factors is discussed in more detail in the testimony of Mr. Ogden in Duquesne Light Statement No. 4 and in Exhibit DBO-4.

52. The Company will obtain default service supply for EV-TOU customers through the same FPFRR products that provide default service supply for the respective customer classes. The FPFRR wholesale suppliers will be paid the same price per megawatt-hour of supply regardless of how much of its supply is for EV-TOU customers. Any mismatches between revenues from EV-TOU supply rates and supply costs paid to FPFRR product suppliers will be recovered/refunded within the existing Rider No. 8 – DSS 1307(e) customer class reconciliation. This approach will avoid cost shifting across customer classes during the EV-TOU Pilot Program and is simple to administer within the existing reconciliation process.

53. Additional details regarding the Company's EV-TOU Pilot are provided in the testimony of Ms. Scholl in Duquesne Light Statement No. 5.

E. SOLAR PPA

54. During the DSP IX program term, Duquesne Light intends to enter into a long-term Solar PPA (i.e., more than four years and less than twenty years) to support a utility-scale solar project (up to a total of 7 MW) in Pennsylvania, preferably in Duquesne Light's service area.

55. The Company seeks to support utility-scale solar alternative energy generating facilities in Pennsylvania for several reasons. First, Duquesne Light believes that a long-term Solar PPA is consistent with Act 129's requirements for default service providers to consider long-term contracts in meeting the prudent mix standard. Second, the Company believes that a long-term solar contract may provide greater opportunity for cost-effective financing for the developer of a utility-scale solar project.

56. Duquesne Light proposes to use the alternative energy credits ("AECs") from the Solar PPA to offset the solar requirements for default service customers. Duquesne Light also intends to acquire the energy from the solar facility under the PPA, sell it into the real-time PJM market and credit the revenues back to default service customers. Duquesne Light also intends to assess the potential of purchasing the associated capacity and ancillary services from the facility.

57. Duquesne Light intends to conduct a competitive solicitation for the Solar PPA. The Company will report the results of the competitive solicitation to the Commission pursuant to the same the process used for the Company's other default service supply auctions. Further, the Commission will be able to review the results and approve or reject the competitive solicitation outcome.

58. Further details regarding the Solar PPA are provided in the testimony of Mr. Davis in Duquesne Light Statement No. 1.

F. RETAIL MARKET ENHANCEMENTS

59. Duquesne Light has supported expansion of competitive retail market opportunities for customers through its eight prior default service plans, and has already implemented a number of innovative market enhancements in order to facilitate the development of the retail market. The Company's customer switching level is among the highest in the Commonwealth, with 67% of the total load in its service area receiving service from an EGS as of March 2020. This also puts

Duquesne Light among the top electric service areas in the country in terms of percentage of total load switched. See Duquesne Light Statement No. 3. Duquesne Light's proposed Default Service Plan contains several important features designed to support retail competition.

Standard Offer Customer Referral Program ("SOP")

60. Duquesne Light currently offers a SOP to Residential and Small C&I customers who are not served by an EGS and who contact the Company to: 1) initiate or move service; 2) discuss choice questions; 3) resolve high bill concerns; or 4) inquire about the SOP. After the customer's specific inquiry is resolved, a Duquesne Light customer service representative provides the customer with information about the SOP utilizing an established script. If the customer indicates that he/she is interested in participating in the SOP, the customer is transferred to a participating EGS for program details and potential enrollment. The SOP provides a fixed price of 7% below the Company's then-effective PTC for a period of 12 months.

61. In the *January 2020 Secretarial Letter*, the Commission encouraged EDCs to include an analysis of their SOPs in their default service filings and to further evaluate their current scripting and any proposed scripting that that informs customers about SOPs while maintaining customer safeguards and protections. Duquesne Light addresses these issues in the testimony of Ms. Scholl, Duquesne Light Statement No. 5.

62. As a result of its analysis of the SOP, Duquesne Light is proposing to enhance its SOP administration process in DSP IX by relying on a third-party vendor to market and enroll SOP customers instead of Duquesne Light customer service representatives making the referrals to EGSs. As explained by Duquesne Light Witness Ms. Scholl in Duquesne Light St. No. 5, Duquesne Light's SOP referral rate is lower than other EDCs that use third-party vendors to market and enroll SOP customers.

63. Duquesne Light proposes to initially contract with AllConnect as its third-party SOP vendor. Duquesne Light has an existing business relationship with AllConnect, which will allow for a low-cost and quick transition. In addition, AllConnect has extensive experience with SOP programs in Pennsylvania working with other EDCs and has administered 700,000 SOP referrals to date.

64. Duquesne Light will utilize scripts for referring customers to AllConnect that are similar to those used by the FirstEnergy EDCs to refer customers to their SOP vendor.

65. AllConnect will charge Duquesne Light \$30 per enrollment. In order to recover these costs, Duquesne Light will pass these costs through to participating EGSs at the same rate.

66. Duquesne Light believes that these enhancements to the SOP program are in the public interest because they will align marketing and enrollment processes with the Company's neighboring EDCs and should increase SOP enrollment levels.

Purchase of Receivables ("POR")

67. Duquesne Light proposes to continue its current POR program for Residential, Small C&I, and Medium C&I customers. Under this Plan, Duquesne Light purchases the account receivables, without recourse, associated with EGS sales of retail electric commodity service to Residential, Small C&I, and Medium C&I customers. Duquesne Light purchases the account receivables at a small discount and then reimburses EGSs for their customer billings regardless of whether it receives payment from customers.

Customer Assistance Program ("CAP") Customer Shopping

68. In the *January 2020 Secretarial Letter*, the Commission encouraged EDCs to evaluate CAP customer shopping issues, including how these issues were addressed in the

FirstEnergy EDCs' DSP IV proceedings and the Commission's proposed CAP shopping policy statement. *January 2020 Secretarial Letter*, p. 9.

69. The Commission-described CAP shopping guidelines include: (1) a CAP shopping product rate at or below the EDC's PTC for the duration of the contract; (2) a prohibition in EGS-CAP customer contracts against fees unrelated to the provision of electric generation service, including early termination and cancellation fees; and (3) the following options for CAP customers upon expiration of the current contract period: enter into another contract with their existing EGS with the same CAP protections, switch to another supplier offering a contract with the same CAP protections, or return to default service. *Proposed Policy Statement Order*, entered on February 28, 2019, at Docket No. M-2018-3006578.

70. Duquesne Light proposes to allow CAP customers to take supply service from EGSs subject to the protections set forth by the Commission. In order for an EGS to qualify to serve CAP customers, the EGS must agree to certain conditions, including but not limited to: (1) agreeing to provide service subject to the conditions set forth in the Proposed Policy Statement, (2) using "rate ready" consolidated EDC billing, and (3) filing an annual affidavit affirming that the EGS intends to enroll CAP customers and that the EGS will comply with all aspects of the Company's CAP customer shopping program.

71. Ms. Scholl explains that the Company will incur approximately \$160,000 in costs to implement CAP customer shopping. In light of these costs and the concern that EGSs may not be willing to meet the terms of the CAP shopping program, the Company will only begin the process of implementing the Program upon receipt of executed CAP Notice affidavits from at least five EGSs.

72. Additional details regarding the Company's CAP customer shopping program are

provided in the testimony of Ms. Scholl in Duquesne Light Statement No. 5.

G. RECOVERY OF NET METERING COMPENSATION PAID TO CUSTOMER-GENERATORS

73. Under the Commission's net-metering regulations, Duquesne Light, as the default service provider, is required to compensate customer-generators at the end of each year for any remaining excess kilowatt hours generated by the customer-generator that were not previously credited against the customer-generator's usage in prior billing periods at the Company's PTC. 52 Pa. Code § 75.13(e).

74. To date, these payments have been relatively small, and Duquesne Light has not recovered them from customers.

75. Beginning with DSP IX, the Company proposes to recover these payments for generation as an expense in the respective default service class over/under collection calculation within the Company's Rider No. 8 – DSS and Appendix A – Transmission Service Charge 1307(e) reconciliations.

76. Duquesne Light believes that it is appropriate to recover payments for excess generation to customer-generators from default service customers because this excess generation reduces the costs that Duquesne Light must pay wholesale suppliers for default service supply.

H. RESPONSES TO JANUARY 2020 SECRETARIAL LETTER

77. In the *January 2020 Secretarial Letter*, the Commission set forth 6 requests for EDCs to address in their next default service plan. Duquesne Light has addressed all of these requests in its testimony in this proceeding. Duquesne Light witness Mr. Davis provides a table in Duquesne Light Statement No. 1 listing each request and providing references to the testimony and page numbers where each request is addressed.

I. REQUESTS FOR WAIVERS

78. As explained above, Duquesne Light is proposing to continue to change rates every six months for Residential & Lighting and Small C&I customers. Duquesne Light notes that the Commission's regulation at 52 Pa. Code § 54.187 requiring quarterly rate changes was adopted prior to the passage of Act 129. Act 129 provides that default service providers shall offer residential and small business customers a default service rate that changes no more frequently than quarterly. 66 Pa. C.S. § 2807(e)(7). Therefore, Duquesne Light believes that its proposal for changes in rates on a semi-annual basis for Residential & Lighting and Small C&I customers complies with Act 129. However, Duquesne Light requests a waiver of 52 Pa. Code § 54.187 to allow semi-annual rate changes for Residential & Lighting customers and Small C&I customers to the extent deemed necessary by the Commission.

79. Section 69.1804 of the Commission's DSP Policy Statement, 52 Pa. Code § 69.1804, provides that default service plans should be for two years, unless otherwise directed by the Commission. As explained previously, Duquesne Light proposes that the term of DSP VIII Program be for four years. As a Policy Statement, 52 Pa. Code § 69.1804 does not have the force of law, and no waiver is required. Nonetheless, for reasons explained above, the Company requests that the Commission approve a four year period for DSP VIII.

80. Duquesne Light also requests additional waivers, if necessary, of the Commission's Orders or Regulations to allow Duquesne Light to implement its Default Service Plan as described herein and in the Testimony and Exhibits that accompany this filing.

J. CUSTOMER NOTIFICATION

81. As indicated by the enclosed certificate of service, Duquesne Light has served a copy of this Petition upon all of the parties to Duquesne Light's most recent default service proceeding at Docket No. P-2016-2543140 and PJM. Duquesne Light is also providing notice of

the filing and a web link to the filing to all licensed EGSs in the Duquesne Light service area. In addition, the Company will provide a hard copy of the filing to any party upon request. Duquesne Light intends to notify its customers of new rates once approved by bill message or as otherwise directed by the Commission.

K. CONCLUSION

Duquesne Light's Default Service Plan is based on a proven, successful and evolving model that will provide reliable, reasonably priced default service supply to its customers, while supporting retail competition. The Plan meets and is consistent with Act 129, and should be approved.

WHEREFORE, for all of the foregoing reasons, Duquesne Light Company respectfully requests that the Pennsylvania Public Utility Commission approve the Default Service Plan as proposed in this Petition as soon as possible, approve the proposed tariff sheets set forth in the form of pro forma retail and EGS Coordination tariff supplements provided herein, grant the approvals for Duquesne Light Company to procure power as set forth herein, including, if needed, credit support from its parent, approve the Supply Master Agreement and related attachments for procuring power for default service customers and grant such other relief just and reasonable under the circumstances.

Respectfully submitted,



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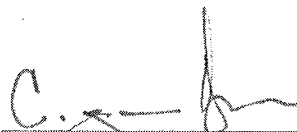
Date: April 20, 2020

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition Of Duquesne Light Company :
For Approval Of Default Service Plan : **Docket No. P-2020-_____**
For The Period June 1, 2021 Through :
May 31, 2025 :

VERIFICATION

I, C. James Davis, hereby state that the facts set forth above are true and correct to the best of my knowledge, information and belief, and I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).



C. James Davis
Director – Rates, Energy Procurement,
and Federal/RTO Affairs

Dated: April 20, 2020

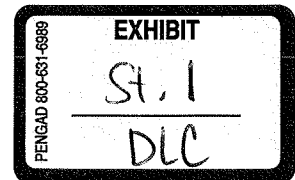
DUQUESNE LIGHT STATEMENT NO. 1

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition Of Duquesne Light Company
For Approval Of Default Service Plan
For The Period June 1, 2021 Through
May 31, 2025**

:
:
:
:

Docket No. P-2020-_____



**DIRECT TESTIMONY OF
C. JAMES DAVIS**

Dated: April 20, 2020

1 **I. INTRODUCTION**

2 **Q. Please state your full name, business affiliation and address.**

3 A. My name is C. James Davis. I am the Director – Rates, Energy Procurement, and
4 Federal/RTO Affairs for Duquesne Light Company (“Duquesne Light” or the
5 “Company”). My business address is 411 Seventh Avenue, Pittsburgh, PA 15219.

6

7 **Q. Please describe your professional and educational background.**

8 A. I graduated from St. Vincent College with a Bachelor of Arts degree in Computer Science
9 in 1989 and Duquesne University with a Master of Business Administration in 1995. Prior
10 to joining Duquesne Light, I had more than 24 years of diversified experience in the utility
11 industry working for Allegheny Energy and FirstEnergy. I have held positions in Risk
12 Management, Finance, Portfolio Management, Generation Dispatch, and Commodity
13 Operations.

14

15 **Q. Please describe your current responsibilities as the Director of Rates, Energy
16 Procurement and Federal/RTO Affairs.**

17 A. I am responsible for the oversight and direction of the Company’s Rates & Tariff Services
18 Department, Supply Procurement and RTO Settlement activities, as well as Federal and
19 RTO affairs. In this role, I am responsible for the planning, development and direction of
20 Duquesne Light’s filing in this Default Service proceeding.

21

22 **Q. What is the purpose of your direct testimony?**

23 A. First, I introduce the Company’s witnesses who provide more detail about specific aspects
24 of Duquesne Light’s plan for default service for the period from June 1, 2021 through May

1 31, 2025 (“Default Service Plan,” “DSP IX,” or “Plan”). Second, I describe Duquesne
2 Light’s default service obligations, and I explain how the Company currently satisfies those
3 obligations under its eighth default service plan (“DSP VIII”). Third, I provide an
4 overview of Duquesne Light’s proposed DSP IX Plan for default service. Finally, I discuss
5 Duquesne Light’s plans to evaluate the benefits of entering into a long-term Power
6 Purchase Agreement (“PPA”) to support a utility-scale solar project (up to 7 MW) in
7 Pennsylvania at some point during the DSP IX supply period.

8
9 **Q. Please introduce the testimony of Duquesne Light’s other DSP IX witnesses.**

10 A. In addition to my direct testimony, Duquesne Light is submitting the testimony of four
11 other witnesses.

- 12 • In Duquesne Light Statement No. 2, John Peoples, Duquesne Light’s Manager of
13 Energy Supply, discusses the power procurement methods and products to be used
14 to supply default service for each customer class, including the Supplier Master
15 Agreement and the Supplier Service Tariff to be used in these procurements. He
16 also evaluates the consistency of the Plan’s procurement methods with certain
17 requirements of Act 129.
- 18 • In Duquesne Light Statement No. 3, Scott G. Fisher, Partner at The NorthBridge
19 Group, reviews the performance of the basic default service model used by
20 Duquesne Light, and explains how the Company’s proposed Plan satisfies the
21 requirements of Act 129 by incorporating a prudent mix of contracts designed to
22 ensure least cost to customers over time, taking into account the benefits of price

1 stability, and by including prudent steps necessary to obtain least cost generation
2 supply.

3 • In Duquesne Light Statement No. 4, David B. Ogden, Duquesne Light’s Manager
4 of Rates and Tariff Services, describes the proposed default service rates and
5 changes to the associated Retail and EGS Coordination Tariffs. Mr. Ogden also
6 describes the Company’s proposed Electric Vehicle Time-of-Use (“EV-TOU”)
7 rates.

8 • In Duquesne Light Statement No. 5, Katherine M. Scholl, Duquesne Light’s
9 Director, Customer Experience, explains how the Company will implement the
10 Company’s proposed Electric Vehicle Time-of-Use Pilot Program (“EV-TOU”)
11 and other retail market initiatives, including the Standard Offer Customer Referral
12 Program (“SOP”) and Customer Assistance Program (“CAP”) Customer Shopping.

13
14 **II. OVERVIEW OF DUQUESNE LIGHT’S DEFAULT SERVICE OBLIGATIONS**
15 **AND CURRENT DSP VIII PLAN**

16 **Q. Please describe Duquesne Light’s default service obligations.**

17 A. Duquesne Light is obligated to provide electric supply service to all customers within its
18 service territory who do not select an electric generation supplier (“EGS”) or who return
19 to default service after being served by an EGS that becomes unable or unwilling to serve.
20 By law, Duquesne Light is required to file a plan with the Pennsylvania Public Utility
21 Commission (the “Commission”) which sets forth how the Company will meet its default
22 service obligations, including a strategy for procuring generation supply, a schedule for
23 implementation, and a rate design to recover the Company’s reasonable costs.

24

1 **Q. How does Duquesne Light currently meet its default service obligations?**

2 A. On May 2, 2016, Duquesne Light filed a petition with the Commission for approval of a
3 default service program for the period from June 1, 2017 through May 31, 2021. On
4 September 20, 2016, Duquesne Light entered into a Non-Unanimous Settlement with
5 various parties, expressing agreement on the petition, while leaving one issue for litigation.
6 On December 22, 2016, the Commission entered an order approving the default service
7 plan, as proposed by Duquesne Light and as modified by the Non-Unanimous Settlement
8 and resolving the contested issue. The resultant approved plan, which currently is in effect,
9 is referred to as “DSP VIII.”

10 Pursuant to Public Utility Code, 66 Pa. C.S. §§ 2807(3.1)-(3.4), under DSP VIII,
11 Duquesne Light procures a “prudent mix” of contracts designed to obtain electric supply
12 at the “least cost over time.” Under DSP VIII, Duquesne Light procures default service
13 supply separately for four different customer classes. The principal procurement features
14 of DSP VIII include the use of fixed-price full requirements supply contracts for smaller
15 customers, and procurement of supply for larger customers based on PJM Interconnection,
16 LLC (“PJM”) hourly spot market prices. DSP VIII also includes tailored contract lengths
17 for each customer class. Solicitations for the full-requirements contracts occur within three
18 months before the commencement of their delivery periods.

19
20 **Q. Does Duquesne Light have other obligations under DSP VIII?**

21 A. Yes. Consistent with its procurement obligations and its approved plan, Duquesne Light
22 uses standardized documents and procedures approved by the Commission when
23 conducting its default service supply procurements. In addition, in accordance with the

1 Commission's direction in its Retail Markets Investigation,¹ Duquesne Light has
2 undertaken a wide range of initiatives to support retail competition.

3
4 **Q. Has Duquesne Light satisfied its obligations?**

5 A. Yes. Duquesne Light has satisfied all of its obligations to date under DSP VIII, including
6 its fundamental obligation, as default service provider, to provide adequate and reliable
7 default service to default service customers at least cost over time. In addition, Duquesne
8 Light continues to provide its "Standard Offer" customer referral program in which default
9 service residential customers contacting Duquesne Light's customer service center are
10 given the option to select among a group of EGSs who have voluntarily chosen to offer
11 customers a 12-month contract priced at 7% below Duquesne Light's default service rate
12 at the time of the offer.

13
14 **III. OVERVIEW OF DUQUESNE LIGHT'S PROPOSED DSP IX PLAN**

15 **Q. What were Duquesne Light's primary policy considerations when developing its
16 proposed Default Service Plan?**

17 A. Duquesne Light developed its Plan to satisfy Act 129, which amended Section 2807(e)(3)
18 of the Public Utility Code, 66 Pa. C.S. § 2807(e)(3), with respect to, among other things,
19 power procurement for default service providers. In developing its Plan to satisfy Act 129,
20 the Company was guided by the Second Default Service Rulemaking Order, which the
21 Commission entered to provide guidance with respect to the interpretation of Act 129's

¹ *Investigation of Pennsylvania's Retail Electricity Market: End State of Default Service*, Docket No. I-2011-2237952, Order entered February 15, 2013.

1 requirements.² Duquesne Light also considered the guidance provided in the Default
2 Service End-State Order in the Investigation of Pennsylvania's Retail Electricity Market.³
3 The Company also considered the Commission's guidance in the *January 2020 Secretarial*
4 *Letter* in the Investigation into Default Service and PJM Interconnection, LLC. Settlement
5 Reforms.⁴ The following table identifies the requests made by the Commission in the
6 *January 2020 Secretarial Letter*, and the Duquesne Light witnesses who address each of
7 them:

² *Default Service and Retail Electric Markets*, Docket No. L-2009-2095604 (Order entered October 4, 2011) ("Second Default Service Rulemaking Order").

³ *Investigation of Pennsylvania's Retail Electricity Market: End State of Default Service*, Docket No. I-2011-2237952, Order entered February 15, 2013.

⁴ *Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms*, Docket No. M-2019-3007101, Secretarial Letter issued January 23, 2020 ("January 2020 Secretarial Letter").

<i>January 2020 Secretarial Letter Request</i> ⁵	Duquesne Light Witness	Duquesne Light DSP IX Statement Reference
1. We request that the large EDCs, in their next DSP filings, provide information and analysis on their NSPL/PLC cost allocation calculations and why they use such cost allocation for consideration by the Commission. This analysis should also include a discussion on why any large EDC may still be using monthly summary usage data instead of actual customer usage data to determine PLCs/NSPLs, and what steps and timelines, would be needed to implement a change to their current practice, as well as any associated costs.	John Peoples	St. No. 2, pp. 15-17
2. We urge all parties participating in the upcoming DSP proceedings to consider how EV specific TOU rate offerings could be made available to consumers.	John Peoples Scott G. Fisher David B. Ogden Katherine M. Scholl	St. No. 2, pp. 20-21 St. No. 3, pp. 29-30 St. No. 4, pp. 13-20 St. No. 5, pp. 19-28
3. We request that the EDCs include in their filings evidence showing how their DSP proposals comply with the prudent mix requirements of the Public Utility Code and case law.	C. James Davis John Peoples Scott G. Fisher	St. No. 1, pp. 4, 14 St. No. 2, pp. 6-7, 17-18 St. No. 3, pp. 4, 17-25
4. We request that the large EDCs include in their upcoming DSP filings a 10-year history of their PTC changes and assess the benefits of a 6-month PTC change compared to a 3-month PTC change. EDCs are also free to propose other PTC change intervals that change no more frequently than on a quarterly basis.	Scott G. Fisher	St. No. 3, pp. 13-16 Exhibit SGF-1
5. We suggest that all the EDCs with CAP programs, as well as interested stakeholders, consider the issues and concerns raised by the Commission in the above-noted prior proceedings when developing their CAP shopping proposals in the upcoming DSP filings.	Katherine M. Scholl	St. No. 5, pp. 11-19
6. We ask that EDCs review the Commission's actions in the above-noted FirstEnergy proceeding concerning SOP scripting and include in their filings analyses of their SOPs, the current scripting, and any proposed scripting that adequately informs customers about the SOPs while maintaining important safeguards and protections.	Katherine M. Scholl	St. No. 5, pp. 5-8

1
2
3
4

In summary, in their testimony, Duquesne Light's witnesses describe the Company's proposed DSP IX Plan and how it is aligned with legislative and regulatory requirements and associated policy considerations.

⁵ *January 2020 Secretarial Letter*, pp. 10-11.

1

2 **Q. Please provide an overview of Duquesne Light's DSP IX Plan.**

3 A. The Default Service Plan is a comprehensive program under which Duquesne Light will
4 provide default service to its customers from June 1, 2021 through May 31, 2025.

5 Duquesne Light has grouped its default service customers into four primary customer
6 classes, which are the same customer class groupings used in its currently effective default
7 service plan: Residential & Lighting,⁶ Small Commercial & Industrial ("Small C&I"),⁷
8 Medium Commercial & Industrial <200kW ("Medium C&I <200kW"),⁸ and HPS-
9 Eligible.⁹ The Plan includes default service offerings tailored to the needs of each customer
10 class, it complies with the requirements of Act 129, and it includes concrete steps to support
11 retail competition. The Default Service Plan also builds upon the foundation established
12 in previous Commission-approved plans, which have facilitated and supported the
13 competitive retail market over a sustained period of time, while offering stable and
14 reasonable rates for small customers who do not elect to receive service from an EGS.

15

16 **Q. Please provide an overview of the proposed default service supply product portfolios,**
17 **and the general methodology to set supply rates, for each of Duquesne Light's**
18 **customer classes under DSP IX.**

⁶ Residential customers are those served under rate schedules RS, RH and RA. Lighting customers are those served under rate schedules AL, SE, SM, SH, and PAL.

⁷ Small C&I customers are those with average monthly metered demands less than 25 kW served under rate schedules GS/GM, GMH and UMS.

⁸ Medium C&I <200kW customers are those served under rate schedules GS/GM and GMH with average monthly metered demands that are at least 25 kW but less than 200kW.

⁹ HPS-Eligible customers are those who are eligible for Rider No. 9 – Day-Ahead HPS. They include Medium C&I ≥200kW customers (customers served under rate schedules GS/GM and GMH with average monthly metered demands that are at least 200 kW) and Large C&I customers (customers served under rate schedules GL, GLH, L, and HVPS).

1 A. In his direct testimony, Mr. Peoples provides a detailed description of the proposed mix of
2 supply products, the procurement approach, and the schedule for implementation.
3 Furthermore, Mr. Ogden's direct testimony outlines the methodology to establish default
4 service supply rates for each customer class. An overview of these aspects of the Plan is
5 as follows:

- 6 • The HPS-Eligible customer class, consisting of Large C&I customers and Medium
7 C&I ≥ 200 kW customers, will continue to be offered default service supply rates
8 that are based on hourly spot market energy prices. Customers also will continue
9 to be charged a pass through of PJM capacity and ancillary services costs as well
10 as the administrative costs of providing hourly price service ("HPS"). The
11 Company proposes to continue to procure the supply for this service through a
12 competitive auction process.
- 13 • Medium C&I < 200 kW customers will continue to be offered default service supply
14 rates that adjust quarterly based on fixed-price full requirements contracts with
15 three-month, non-overlapping delivery periods. The contracts will be procured
16 within three months before the commencement of their delivery periods. Default
17 service supply for the Medium C&I < 200 kW customers will be obtained through
18 competitive auctions, with winning bidders selected on the basis of lowest price.
- 19 • Small C&I customers will continue to be offered default service supply rates that
20 adjust every six months based on fixed-price full requirements contracts with
21 twelve-month and twenty-four-month, overlapping delivery periods. The contracts
22 will be procured within three months before the commencement of their delivery
23 periods. Default service supply for the Small C&I customers will be obtained

1 through competitive auctions, with winning bidders selected on the basis of lowest
2 price.

- 3 • Residential & Lighting customers will continue to be offered default service supply
4 rates that adjust every six months based on fixed-price full requirements contracts
5 with twelve-month and twenty-four-month, overlapping delivery periods. The
6 contracts will be procured within three months before the commencement of their
7 delivery periods. Default service supply for the Residential & Lighting customers
8 will be obtained through competitive auctions, with winning bidders selected on
9 the basis of lowest price.

10
11 **Q. What changes is Duquesne Light proposing in DSP IX for each customer class as**
12 **compared to the Company's existing plan in effect for DSP VIII?**

13 A. The major changes are summarized below:

- 14 • **Solar Project Plan** – As I describe later in my direct testimony, Duquesne Light is
15 proposing to enter into a long-term contract to support a utility-scale solar project
16 (up to 7 MW). The alternative energy credits associated with this project would be
17 used to help satisfy the solar requirements of serving all default service customers
18 at some point during the DSP IX period and beyond.
- 19 • **EV-TOU Pilot Program** – Duquesne Light is proposing to offer an EV-TOU
20 supply rate for Residential, Small C&I and Medium C&I <200kW customers,¹⁰ on

¹⁰ EV-TOU service under the Pilot Program will be offered to Residential, Small C&I, and Medium C&I <200kW customers eligible for Rider No. 8 who own or lease a plug-in battery electric vehicle or a plug-in hybrid electric vehicle (collectively "EV") or offer charging infrastructure to employees or visitors. Customers eligible for Rider No. 9 – HPS will not be eligible for the EV-TOU Pilot Program. Unmetered accounts on Rider No. 8 also are not eligible for EV-TOU Pilot Program.

1 a pilot basis, to encourage electric vehicle adoption and to assist customers with
2 EVs in reducing their electric bills. Ms. Scholl in her direct testimony discusses
3 this program in greater detail, and Mr. Ogden describes in his direct testimony the
4 process for determining the EV-TOU supply rates.

- 5 • **Standard Offer Product** – As Ms. Scholl describes in her direct testimony,
6 Duquesne Light is proposing to enter into a contract with a third-party vendor to
7 administer the Company’s SOP.
- 8 • **Customer Assistance Program Customer Shopping** – Ms. Scholl also describes
9 in her direct testimony Duquesne Light’s proposal to allow CAP customers to shop
10 for an electric supplier with certain conditions and protections.

11
12 **Q. Does Duquesne Light’s proposed DSP IX include products with delivery periods that**
13 **extend beyond May 31, 2025 (the end of the DSP IX period)?**

14 **A.** Yes, some of the supply products for the Residential & Lighting and Small C&I customer
15 classes extend beyond the DSP IX period. As explained by Mr. Fisher in his direct
16 testimony, this preserves the option for a fairly seamless continuation of the laddered
17 procurement cycle as Duquesne Light transitions from DSP IX to DSP X. Mr. Fisher also
18 explains that these contracts also avoid subjecting Residential & Lighting and Small C&I
19 customers to a “hard stop” with regard to their supply products at the end of the DSP IX
20 period, which could expose customers to magnified risks and rate instability. Furthermore,
21 having contracts that extend beyond the default service period is consistent with the
22 approach approved by the Commission in DSP VI, DSP VII, and DSP VIII. It should be
23 noted that the solicitations for these products are not scheduled until September 2023, so

1 there is a significant amount of time before new supply commitments extending beyond
2 the DSP IX period are made should legislative or regulatory developments require changes
3 to the supply product mix.
4

5 **Q. Is Duquesne Light proposing to use the same default service SMA for DSP IX that it**
6 **is using for DSP VIII?**

7 A. As explained by Mr. Peoples in his direct testimony, the Company will continue to use the
8 SMA template that was developed by the Procurement Collaboration Working Group, with
9 minor revisions summarized by Mr. Peoples. The proposed Supply Master Agreement is
10 attached to the direct testimony of Mr. Peoples.
11

12 **Q. Does Duquesne Light's DSP IX proposal include a contingency plan in case a supply**
13 **solicitation fails to attract a sufficient number of qualified bids, the Commission does**
14 **not approve the submitted bids, or a winning bidder defaults on its obligations?**

15 A. Yes. Mr. Peoples describes the Company's contingency plan in his direct testimony.
16

17 **Q. How will Duquesne Light recover its default service supply costs?**

18 A. In his direct testimony, Mr. Ogden explains how all costs associated with default service
19 supply procurement will be recovered.
20

21 **Q. What programs is Duquesne Light proposing to support retail market competition in**
22 **DSP IX?**

23 A. Duquesne Light is proposing several programs to support retail market competition:

- 1 • **Standard Offer Customer Referral Program.** As Ms. Scholl explains in her
2 direct testimony, Duquesne Light will contract with a third party to advise certain
3 default service customers that contact the Company that they can receive their
4 supply from participating EGSs at rates that will be 7% below the current Price to
5 Compare (“PTC”).
- 6 • **CAP Shopping.** As Ms. Scholl explains in her direct testimony, Duquesne Light
7 proposes to allow CAP customers to shop for electric supply, subject to limitations
8 on the EGS products for which CAP customers may be eligible.
- 9 • **Purchase of Receivables Plan.** Duquesne Light will continue its Purchase of
10 Receivables (“POR”) plan, with similar rules and conditions to those in the current
11 plan. Under this Plan, Duquesne Light purchases the accounts receivables, without
12 recourse, associated with EGS sales of retail electric commodity service to
13 Residential, Small C&I, and Medium C&I <200kW customers at a small discount
14 and then reimburses EGSs for their customer billings regardless of whether
15 payment is received by Duquesne Light from customers.
- 16 • **Bill Ready.** Duquesne Light will continue a Bill Ready program. The Bill Ready
17 program will facilitate the EGS development of tailored products for customers.

18 In addition, as discussed by Mr. Fisher in his direct testimony, Duquesne Light’s Plan will
19 support the competitive retail market in other ways, including by its use of competitive
20 solicitations for fixed-price full requirements products. As Mr. Fisher explains, fixed-price
21 full requirements default service supply products help to provide a more transparent price-
22 to-compare benchmark against which customers can compare competing retail offers.
23 Furthermore, the competitive solicitations for the fixed-price full requirements supply
24 products ensure that EGSs will compete against market-based default service rates.
25

26 **V. SOLAR PROJECT PLAN**

27 **Q. Please describe the Company’s plan to support solar projects in Pennsylvania.**

28 **A.** The Company is evaluating the benefits of entering into a long-term Purchase Power
29 Agreement (i.e., more than four years and less than twenty years) to support a utility-scale
30 solar project (up to a total of 7 MW) in Pennsylvania, preferably in Duquesne Light’s

1 service area.¹¹ The alternative energy credits (“AECs”) associated with this project (or
2 projects up to the 7 MW cap) would be used to help satisfy the solar requirements of serving
3 all default service customers.

4 The Company seeks to support utility-scale solar alternative energy generating
5 facilities in Pennsylvania in an effort to achieve least-cost environmental compliance with
6 the requirements of Act 129. The development of solar facilities is consistent with Act
7 129’s objectives, as it addresses the Alternative Energy Portfolio Standards (“AEPS”)
8 “prudent mix” and “least cost” requirements. The Company believes that a long-term solar
9 contract may provide greater opportunity for cost-effective financing for the developer of
10 a utility-scale solar project.

11
12 **Q. What process will the Company follow to obtain a long-term solar PPA?**

13 A. The Company will follow the requirements to acquire supply in Act 129, which allows the
14 Company to rely on an auction, request for proposal (“RFP”), or bilateral agreement with
15 certain conditions.¹² Duquesne Light would conduct a competitive solicitation for the PPA.
16 The results of the competitive solicitation would be reported to the Commission consistent
17 with the process used for the Company’s other default service supply auctions. The
18 Commission would have the opportunity to review the results and approve or reject the
19 competitive solicitation outcome.

20

¹¹ Other major Pennsylvania Electric Distribution Utilities have already signed 10-year power purchase agreements for solar alternative energy credits.

¹² 66 Pa.C.S. § 2807(e)(3.1).

1 **Q. Does the Company plan to purchase the associated energy provided by the solar**
2 **facility?**

3 A. Yes, the Company plans to purchase the associated energy. The Company wants to
4 provide greater opportunity for cost-effective financing for developers of utility-scale solar
5 projects and believes that a PPA that includes energy may be the best means to do so.
6

7 **Q. What does Duquesne Light intend to do with the energy that is produced by the**
8 **utility-scale solar project?**

9 A. The Company proposes to sell the energy into the PJM market on a real-time basis in order
10 to monetize the energy of the solar PPA. The Company would accrue these revenues and
11 would reconcile them back to its default service customers at the same weighting as each
12 customer class's solar AEC obligation share. The necessary language to credit these solar
13 PPA revenues already exists as a placeholder within Duquesne Light's current Retail
14 Tariff.
15

16 **Q. Does the Company plan to purchase the associated capacity and ancillary services**
17 **provided by the solar facility?**

18 A. The Company plans to assess the potential of purchasing the associated capacity and
19 ancillary services as part of the competitive solicitation process. In particular, the
20 Company plans to evaluate the costs and benefits for default service customers of whether
21 to include capacity and ancillary services in the PPA as well as consider the impact on cost-
22 effective financing for developers.
23

1 **Q. How does the SMA accommodate the solar PPA?**

2 A. As part of DSP VIII, the Company amended the SMA to include language that permits the
3 Company to allocate AECs to third-party wholesale suppliers. If and when Duquesne Light
4 enters into a long-term PPA for AECs, Duquesne Light will continue to require each
5 wholesale supplier to transfer AECs to Duquesne Light corresponding to the AEPS
6 obligations associated with the amount of default service load served by that supplier. Any
7 AECs allocated to a wholesale supplier will be credited to that supplier's AEPS
8 obligation.¹³

9
10 **Q. Did the Company propose a solar program in DSP VIII?**

11 A. Yes. The Company proposed a similar process by which the Company could, subject to
12 Commission approval, enter into a PPA with a solar developer in the Company's service
13 territory to serve a portion of the Company's default service load. The Commission
14 approved that proposal as part of the Company's DSP VIII, and the Company conducted a
15 solicitation for prospective solar developers; however, the Company ultimately did not
16 enter into a PPA under that program. A preliminary market survey indicated that there were
17 significant challenges for a solar developer to match the Company's desire to procure only
18 the AECs with another entity willing to enter into a contract for the remaining attributes
19 for the same contract term.

20

¹³ During each default service solicitation, at a time prior to the bid due date, Duquesne Light will inform bidders of the number of AECs, if any, to be allocated per tranche for all customer classes. The perceived value of any allocated AECs should reduce the bid prices of default service suppliers. Furthermore, Duquesne Light does not intend to require default service suppliers to take unknown quantities of solar generation at uncertain times of the day from any solar project, and once a default service contract is signed, it will not be altered even if Duquesne Light subsequently enters into a long-term solar contract.

1 **Q. How does the Company's proposal in DSP IX differ from the one approved in DSP**
2 **VIII?**

3 A. As I described earlier in my testimony, the Company's proposal in DSP IX would include
4 the energy and AEC, and potentially all other attributes, of the solar facility. This would
5 address the difficulty of matching a AEC offtake agreement with another offtake agreement
6 for the energy attribute. In addition, it would potentially mitigate any risk premium the
7 developer would have to price into a contract due to tenor or credit risk of the second entity.

8

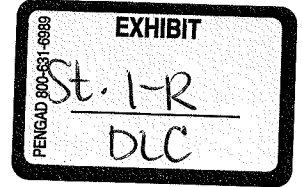
9 **VI. CONCLUSION**

10 **Q. Does this conclude your direct testimony?**

11 A. Yes.

DUQUESNE LIGHT STATEMENT NO. 1-R

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**



**Petition Of Duquesne Light Company :
For Approval Of Default Service Plan :
For The Period June 1, 2021 Through :
May 31, 2025 :**

Docket No. P-2020-3019522

REBUTTAL TESTIMONY OF

C. James Davis

Dated: August 14, 2020

1 **I. Introduction**

2 **Q. Please state your full name and business address.**

3 A. My name is C. James Davis. My business address is 411 7th Avenue, Pittsburgh PA 15219.

4

5 **Q. What is your position at Duquesne Light Company?**

6 A. I am the Director, Rates, Energy Procurement, and FERC/RTO Affairs for Duquesne Light
7 Company (“Duquesne Light” or “Company”).

8

9 **Q. Did you previously submit direct testimony in this proceeding on behalf of the**
10 **Company?**

11 A. Yes. I am the same C. James Davis that submitted direct testimony, Statement No. 1, on
12 April 20, 2020, with the Company’s initial filing.

13

14 **Q. What is the purpose of your rebuttal testimony?**

15 A. My rebuttal testimony will address Christopher H. Kallaher’s criticism, on behalf of a
16 coalition of electric generation suppliers (EGSs) that includes Direct Energy Services,
17 Interstate Gas Supply, Inc., Shipley Choice LLC, NRG Energy, Inc, Vistra Energy Corp.,
18 ENGIE Resources LLC., and WGL Energy Services, Inc. (EGS Parties), of the Company’s
19 proposed solar long-term power purchase agreement. I also will respond to the comments
20 and recommendations made by the Office of Consumer Advocates (OCA) witness Dr.

1 Serhan Ogur regarding his recommendation of revenue neutrality of the long-term solar
2 PPA.

3 I note that MAREC-Action witness Dr. Stanton also commented on the Company's
4 solar PPA proposal. Company witness Scott Fisher responds to Dr. Stanton's comments in
5 his rebuttal testimony, DLC St. No. 3-R.

6
7 **Q. Are you sponsoring any Exhibits along with your rebuttal testimony?**

8 A. Yes, I am sponsoring Exhibit CJD-1R, which comprises the EGS Parties' response to the
9 Company's discovery request DLC-EGS Parties I-6.

10 **II. Long-Term Solar Purchase Power Agreement**

11 **Q. EGS Parties witness Kallaher expresses concern that, "the duration of the Company's
12 proposed solar PPA may extend beyond the term of DSP IX."¹ What is your response?**

13 A. The Company's proposed PPA is a manageably sized program accounting for less than 55%
14 of the projected SREC requirement and seeks to strike a balance between managing the risk
15 and benefits of long-term contracts. Mr. Kallaher himself even stated in his direct testimony
16 on page 23 line 6 that "...To be clear, I do not object to long-term contracts generally," but
17 then goes on to aver the Company should not be allowed to enter into long-term contracts
18 as part of DSP IX, despite the Commission's encouragement in its *January 2020 Secretarial*
19 *Letter* to carefully consider long-term contracts as part of a prudent mix.²

¹ EGS Parties St. No. 1, p. 23, lines 13-21.

² *Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms*, Docket No. M-2019-3007101, Secretarial Letter issued January 23, 2020 ("January 2020 Secretarial Letter"), p. 8.

1

2 **Q. Do you agree with Mr. Kallaher's suggestion that the Company's proposed solar PPA**
3 **should be denied because it might be uneconomic in the long term?**

4 A. No, I do not. While I agree that there is a possibility that such a contract could be
5 uneconomic in the long term, there is also a possibility that such a contract could be lucrative
6 for customers over the long term. From a risk management or prudence perspective, adding
7 measured volumes of long-term contracts can provide the opportunity to gain more
8 information about the solar generation market in Duquesne Light's service area, support a
9 utility-scale solar project in Pennsylvania, preferably in Duquesne Light's service area,
10 while being sized to mitigate risks associated with the long-term commitment.

11

12 **Q. Mr. Kallaher expresses "concerns that this kind of 'support' for solar development**
13 **will create a barrier to more productive opportunities that may be in the offing."³ Do**
14 **you agree?**

15 A. No, providing this kind of support through a default service arrangement is not anti-solar;
16 rather on the contrary, the Company believes that it is pro-solar and seeks to be supportive
17 of renewable resources in its service area and the state as a whole. Moreover, Mr. Kallaher
18 admitted in discovery that he is not aware of any "more productive [solar] opportunities that
19 may be in the offing." See Exhibit CJD-1R. Thus, Mr. Kallaher cannot plausibly argue that
20 the Company's solar PPA is somehow impeding solar developments – if anything, Mr.

³ EGS Parties St. No. 1, p. 25, lines 5-6.

1 Kallaher's admission suggests that the Company's solar PPA could spur solar development
2 that otherwise might not exist.

3
4 **Q. Mr. Kallaher recommends that the Company's solar PPA be put on hold while the**
5 **Commission monitors the legislative session.⁴ Do you agree?**

6 A. No, I do not. While I am not an attorney, the Company follows the laws as they currently
7 exist, not as they might be or as others wish them to be. It is always a fact that the legislature
8 *might* pass a law that pertains to a party's proposal. The omnipresence of such a possibility
9 should not be a reason for inaction – if it were, no new utility program could ever be
10 approved. Correspondingly, the potential for legislative action concerning solar
11 developments is not a reason to deny the Company's proposed solar PPA.

12
13 **Q. OCA witness Ogur recommends that "DLC should demonstrate that any solar PPA**
14 **that DLC will propose should be at least revenue neutral over the term of the**
15 **contract."⁵ What is your response?**

16 A. I disagree with his premise that DLC should demonstrate that any solar PPA that DLC will
17 propose should be at least revenue neutral over the term of the contract. The nature of a
18 long-term contract is that it typically extends beyond the discoverable market price period
19 for the various attributes. For example, forward energy market prices are typically
20 discoverable for a period of no more than three years. The same can also be said for capacity

⁴ EGS Parties St. No. 1, p. 26, lines 7-10.

⁵ OCA St. No. 1, p. 18, lines 19-23.

1 prices. Price projections beyond that horizon would be speculative, so a demonstration of
2 revenue-neutrality would be subjective. To help ensure that the least cost PPA is obtained,
3 the Company proposes to hold a competitive RFP to be conducted by its independent default
4 service auction manager. Once bids are received, the Commission will be in a better position
5 to decide whether or not to enter into the contract.

6

7 **Q. Does this conclude your rebuttal testimony?**

8 **A.** Yes, at this time.

Exhibit CJD- 1R

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

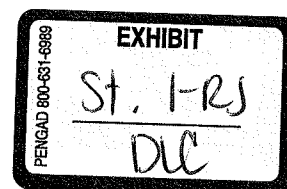
DOCKET NO. P-2020-3019522

- 6) Reference page 25, lines 5-8 of Mr. Kallaher's direct testimony. Please identify any such "more productive" solar development opportunities that are "in the offing."

RESPONSE: I had no specific projects in mind when I made that statement. My point is that I consider projects that are driven by private capital based on a developer's own assessment of the market opportunity in building such a project to be more efficient and thus more product than having a utility solicit a long-term PPA for solar capacity based on what appears to be little more than a general sense that solar power is a good thing.

Provided By: Chris Kallaher

DUQUESNE LIGHT STATEMENT NO. 1-RJ



**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition Of Duquesne Light Company :
For Approval Of Default Service Plan :
For The Period June 1, 2021 Through :
May 31, 2025 :**

Docket No. P-2020-3019522

REJOINDER TESTIMONY OF

C. James Davis

Dated: September 4, 2020

1 **Q. Please state your full name and business address.**

2 A. My name is C. James Davis. My business address is 411 7th Avenue, Pittsburgh PA 15219.

3

4 **Q. What is your position at Duquesne Light Company?**

5 A. I am the Director, Rates, Energy Procurement, and FERC/RTO Affairs for Duquesne Light
6 Company (“Duquesne Light” or “Company”).

7

8 **Q. Did you previously submit testimony in this proceeding on behalf of the Company?**

9 A. Yes. I am the same C. James Davis that submitted direct testimony, Statement No. 1, on
10 April 20, 2020, and rebuttal testimony, Statement No. 1-R, on August 14, 2020.

11

12 **Q. What is the purpose of your rejoinder testimony?**

13 A. My rejoinder testimony will respond to comments of EGS Parties¹ witness Christopher H.
14 Kallaher regarding the Company’s proposed long-term solar power purchase agreement
15 (“PPA”).

16

17 **Q. Are you sponsoring any Exhibits along with your rebuttal testimony?**

18 A. No.

¹ EGS Parties comprise Direct Energy Services, Interstate Gas Supply, Inc., Shipley Choice LLC, NRG Energy, Inc, Vistra Energy Corp., ENGIE Resources LLC., and WGL Energy Services, Inc.

1

2 **Q. EGS Parties witness Kallaher argues that the Company's solar PPA may trigger the**
3 **application of FERC's pending Minimum Offer Price Rule ("MOPR") to the**
4 **Company's default service plan.² Please respond.**

5 A. The Company has responded to Mr. Kallaher's concerns about the applicability of the
6 MOPR to its DSP in prior testimonies.³ I will not restate those arguments here, except to
7 add that it is not the intention of the Company to subject itself to the MOPR and that the
8 Company does not intend to violate the MOPR. Should a Solar PPA trigger application of
9 the MOPR to Duquesne Light's default service plan, the Company would not seek to enter
10 into the PPA. The Company will be in a better position to assess this issue after the MOPR
11 rules are finalized.

12

13 **Q. Do you wish to address any of Mr. Kallaher's other points in his surrebuttal testimony?**

14 A. Yes. Mr. Kallaher's surrebuttal testimony misstates the size of the Company's proposed
15 PPA as 15 MW.⁴ As I indicated in my direct testimony, the Company proposes to procure a
16 solar PPA of approximately 7 MW.

17

18 **Q. Does this conclude your rejoinder testimony?**

19 A. Yes, at this time.

² EGS Parties Statement No. 1-SR, p. 12, lines 13-22.

³ E.g., DLC Statement No. 2-R, pp. 2-3.

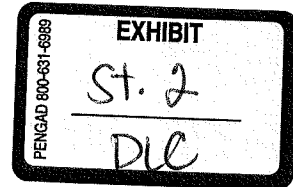
⁴ EGS Parties Statement No. 1-SR, p. 14, line 8.

DUQUESNE LIGHT STATEMENT NO. 2

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition Of Duquesne Light
Company For Approval Of
Default Service Plan For The
Period June 1, 2021 Through May
31, 2025** :
: **Docket No. P-2020-_____**
:

**DIRECT TESTIMONY OF
JOHN PEOPLES**



Dated: April 20, 2020

1 **I. INTRODUCTION**

2

3 **Q. Please state your full name and business address.**

4 A. John Peoples, 411 Seventh Avenue, Pittsburgh, Pennsylvania 15219.

5

6 **Q. What is your position at Duquesne Light Company (“Duquesne Light” or**
7 **“Company”)?**

8 A. I am employed by Duquesne Light as the Manager of Energy Procurements and
9 Settlements.

10

11 **Q. How long have you worked at Duquesne Light?**

12 A. I have worked at Duquesne Light for over six years, having joined the Company in
13 January 2014.

14

15 **Q. What are your current responsibilities?**

16 A. I am responsible for conducting competitive solicitations to procure power to serve
17 Duquesne Light’s default service load. I represent Duquesne Light’s voting
18 interests and daily communications with PJM market related activities. I also act
19 as the Company’s representative with default service wholesale suppliers. In
20 addition, I manage the daily sales forecasts for the Company’s control area, which
21 includes all electrical customers in our load zone – whether served by Duquesne
22 Light default service or by a competitive electric generation supplier (“EGS”). I

1 have responsibility for verifying the settlement process with PJM and FERC
2 submissions.

3

4 **Q. What are your qualifications, work experience and educational background?**

5 A. I have worked in the energy industry for over 25 years. I have a liberal arts degree
6 from Washington and Jefferson College. I have a Masters of Business
7 Administration from Duquesne University.

8 Upon graduation, I took a position at Consolidated Natural Gas (CNG)
9 where I was an energy analyst. I was promoted to a role whereby I managed the
10 CNG default customer portfolio for their various utilities. I have worked for Detroit
11 Edison, Green Mountain Energy, Strategic Energy, and Direct Energy Business.
12 While at these companies I had responsibilities for managing a portfolio of energy
13 customers on a physical and financial basis.

14 I have been responsible for managing Duquesne Light's default service
15 power portfolio since April 2015, which was a year into the Company's seventh
16 default service plan ("DSP VII"). I provided testimony and managed the
17 Company's eighth default service plan ("DSP VIII"). I have organized the
18 competitive solicitations for default procurement and have performed subsequent
19 tasks related to the execution of the default service supply contracts with the
20 winning suppliers.

21

22 **Q. Have you previously provided testimony to the Pennsylvania Commission on**
23 **a Duquesne Light Default Service Plan?**

1 A. Yes. I testified in Docket No. P-2016-2543140, Petition of Duquesne Light
2 Company for Approval of Default Service Plan for the Period June 1, 2017 through
3 May 31, 2021.¹

4
5 **Q. What is the purpose of your direct testimony?**

6 A. The purpose of my testimony is to provide support for the Company's default
7 service plan for delivery of supply over the June 1, 2021 through May 31, 2025
8 period (the "Plan" or "DSP IX"), particularly with respect to the power procurement
9 methods and supply products to be utilized. I will provide an overview of the Plan
10 as it relates to power procurement. I also will evaluate the consistency of the Plan
11 with certain aspects of Act 129. In addition, I will discuss changes to the Supplier
12 Master Agreement ("SMA") template that was developed through the Procurement
13 Collaboration Working Group.

14
15 **Q. Are you sponsoring any exhibits as part of your direct testimony?**

16 A. Yes, I am sponsoring four exhibits.

17 **Exhibit JP-1** Overview of Supply Products and Auction Schedule by
18 Procurement Class

19 **Exhibit JP-2** Number of Load Tranches and Supplier Load Caps

20 **Exhibit JP-3** Supplier Master Agreement

21
22 **Q. Please explain how these exhibits were prepared.**

¹ See *Petition of Duquesne Light Company for Approval of Default Service Plan for the Period June 1, 2017 through May 31, 2021*, Docket No. P-2016-2543140 (Order entered December 22, 2016).

1 A. All of the above referenced exhibits were prepared by me or under my supervision.

2

3 **Q. How is your testimony organized?**

4 A. Section I is an introduction. Section II provides an overview of the Plan with regard
5 to its power procurement methods and supply product portfolios. Section III
6 includes a review of how the Plan satisfies certain provisions of Act 129. Section
7 IV discusses the Supplier Master Agreement, and Section V discusses the Electric
8 Vehicle Time-of-Use Pilot Program. Section VI addresses possible modifications
9 to satisfy the Company's Alternative Energy Credit ("AECs") obligations during
10 the DSP VIII period.

11

12 **II. OVERVIEW OF DUQUESNE LIGHT'S DSP IX PROCUREMENT PLAN**

13

14 **Q. Please summarize Duquesne Light's proposed supply procurement plan for**
15 **default service customers.**

16 A. The DSP IX procurement plan provides for 100% of default service power supply
17 needs during the 48-month period from June 1, 2021, through May 31, 2025. As
18 in DSP VIII, portfolios of supply products will be separately procured for each of
19 four different customer classes: Residential & Lighting,² Small Commercial &
20 Industrial ("Small C&I"),³ Medium Commercial & Industrial <200kW ("Medium

² Residential customers are those served under rate schedules RS, RH and RA. Lighting customers are those served under rate schedules AL, SE, SM, SH, and PAL.

³ Small C&I customers are those with average monthly metered demands less than 25 kW served under rate schedules GS/GM, GMH and UMS.

1 C&I <200kW”),⁴ and hourly price service eligible (“HPS-Eligible”).⁵ Default
2 service supply for each of the customer classes will be procured through
3 competitive solicitations for full requirements, load-following products. For the
4 Residential & Lighting, Small C&I, and Medium C&I <200kW classes, the pricing
5 of the products will be fixed on a dollars per megawatt-hour basis. The pricing of
6 the products for the HPS-Eligible class will be based on day-ahead hourly market
7 prices. A depiction of the procurement products and the timeline for procurement
8 is shown in Exhibit JP-1, and Figure 1 below summarizes the different classes’
9 supply product portfolios.

⁴ Medium C&I <200kW customers are those served under rate schedules GS/GM and GMH with average monthly metered demands that are at least 25 kW but less than 200kW.

⁵ HPS-Eligible customers are those who are eligible for Rider No. 9 – Day-Ahead HPS. They include Medium C&I \geq 200kW customers (customers served under rate schedules GS/GM and GMH with average monthly metered demands that are at least 200 kW) and Large C&I customers (customers served under rate schedules GL, GLH, L, and HVPS).

Figure 1: Overview of Supply Portfolios by Customer Class

Residential & Lighting	Small C&I (< 25 kW)	Medium C&I <200kW (≥ 25 kW and < 200 kW)⁶	HPS-Eligible (≥ 200 kW)⁷
<ul style="list-style-type: none"> • Six-month fixed default service supply rates • Continue procurement of 50% of supply from one-year and 50% of supply from two-year full requirements supply products with overlapping delivery periods • Products are procured every six months within three months of start of delivery 	<ul style="list-style-type: none"> • Six-month fixed default service supply rates • Continue procurement of 50% of supply from one-year and 50% of supply from two-year full requirements supply products with overlapping delivery periods • Products are procured every six months within three months of start of delivery 	<ul style="list-style-type: none"> • Three-month fixed default service supply rates • Continue procurement of 100% of supply from three-month full requirements supply products with delivery periods that do not overlap • Products are procured every three months within three months of start of delivery 	<ul style="list-style-type: none"> • Hourly price default service supply rates • Continue to procure supply through an auction every twelve months within three months of start of delivery • Winning suppliers are paid their fixed bid price plus their share of the associated (day-ahead hourly) energy, capacity, and ancillary service charges billed pursuant to Rider No. 9.
<ul style="list-style-type: none"> • Approximately 34% of total system load 	<ul style="list-style-type: none"> • Approximately 7% of total system load 	<ul style="list-style-type: none"> • Approximately 13% of total system load 	<ul style="list-style-type: none"> • Approximately 46% of total system load

2

3 **Q. Why does the DSP IX Plan include different default service supply portfolios**
 4 **for different customer classes?**

5 **A.** Different customer classes should have customized procurement strategies that
 6 each focus on the specific needs of the respective customer class. Residential &
 7 Lighting and Small C&I customers on default service will benefit from having
 8 greater assurances of price stability, while the Medium C&I <200kW and HPS-

⁶ Duquesne Light lowered the threshold for customers who are not offered default service rates based on day-ahead hourly market prices from < 300 kW to < 200 kW on June 1, 2019.

⁷ Duquesne Light lowered the threshold for customers who are offered default service rates based on day-ahead hourly market prices from ≥ 300 kW to ≥ 200 kW on June 1, 2019.

1 Eligible customers generally are better able to manage the volatility of shorter-
2 term default service prices. In Duquesne Light Statement No. 3, Duquesne Light
3 witness Fisher presents analysis that supports the conclusion that the benefits of
4 price stability for smaller customers, who are more likely to rely on default
5 service to provide these benefits, will be achieved under DSP IX. Having tailored
6 and separate default service supply portfolios for each class also is consistent with
7 Commission guidance. Specifically, in its Second Default Service Rulemaking
8 Order, in its discussion of the “prudent mix” standard under Act 129, the
9 Commission stated:

10 The Commission notes there was substantial unanimity on this point
11 and agrees with the parties that the “prudent mix” standard should
12 be interpreted to allow for a class-specific product mix that best
13 matches the needs of each DSP customer class.⁸

14 By including tailored and separate supply portfolios for each of the various
15 customer classes, the Plan reflects the different needs and propensities of the
16 various customer classes, and helps in properly assigning costs and risks. The
17 supply product portfolios for the different customer classes take into account each
18 class’ need for price stability, the different shopping propensity and market
19 sophistication of each customer class, and the Company’s desire to develop the
20 competitive retail market in Duquesne Light’s service area.

⁸ *Default Service and Retail Electric Markets*, Docket No. L-2009-2095604 (Order entered October 4, 2011) (“*Second Default Service Rulemaking Order*”), p. 69.

1 **Residential & Lighting and Small C&I**

2 **Q. Please describe Duquesne Light's proposed default supply procurement plan**
3 **for Residential & Lighting and Small C&I customers.**

4 A. DSP IX will continue the basic procurement strategy for the Residential &
5 Lighting and Small C&I classes that was established in DSP VIII. Specifically,
6 the supply portfolios for these customer classes will consist of a combination of
7 twelve-month and twenty-four-month products, with delivery periods overlapping
8 on a semiannual basis. Accordingly, the default service rates for these classes
9 will change twice annually, once on June 1st and once on December 1st.
10 Residential & Lighting default service supply will be split into 48 equal tranches,
11 each representing approximately 2.08333% of the total Residential & Lighting
12 class default service load in each hour. The Small C&I default service supply will
13 be split into eight tranches consisting of twelve-month and twenty-four-month
14 products, each representing 12.5% of the total Small C&I default service load in
15 each hour. These products' delivery periods will also overlap on a semiannual
16 basis.

17
18 **Q. Are there supply portfolio changes that Duquesne Light is proposing for**
19 **Residential & Lighting and Small C&I customers in DSP IX as compared to**
20 **its existing DSP VIII Plan?**

21 A. No.

22
23 **Q. Why is the proposed procurement plan for Small C&I customers the same as**

1 **for Residential & Lighting customers?**

2 A. As in DSP VIII, the Company's proposed procurement plan for Small C&I
3 customers is the same for Residential & Lighting customers because both classes
4 have somewhat similar levels of customer switching and market sophistication.
5 Therefore, it is reasonable to implement the same procurement approach for both
6 classes. However, the supply product portfolios for these two classes are kept
7 separate to safeguard against unnecessary cost shifting between customers. To
8 increase bidder participation in the solicitations, the supply solicitations for these
9 customer classes will be conducted simultaneously. This also allows for costs to
10 be efficiently managed.

11

12 **Q. Mr. Peoples, Duquesne Light's Commission-approved DSP VIII Plan includes**
13 **supply products for Residential & Lighting and Small C&I customers with**
14 **delivery periods that extend into the DSP IX period (sometimes referred to as**
15 **"overhang" products). In its DSP IX Plan, is the Company proposing any**
16 **overhang products with delivery periods that extend beyond the DSP IX**
17 **period?**

18 A. Yes. Like the previous three Commission-approved default service plans, DSP IX
19 includes products that will continue or overhang into the next default service period
20 for Residential & Lighting and Small C&I customers that will provide price
21 stability benefits to these small customers. These products will avoid subjecting
22 these customers to a "hard stop" with regard to their supply products at the end of
23 the DSP IX period. By so doing, the Company will avoid the need to replace all of

1 the default service supply for these customer classes in a short period of time at the
2 end of the DSP IX period, a situation which could expose customers to magnified
3 risks and rate instability. Furthermore, the Company's Plan to include some
4 overhang products involves considerable procurement flexibility, as the first
5 solicitation for any overhang products is not scheduled until September 2023, so
6 there is a significant amount of time before new supply commitments extending
7 beyond the DSP IX period are made, should changes need to be made to the supply
8 product mix due to legislative or regulatory mandates. In the meantime, these
9 solicitations remain scheduled because they allow for the option for a fairly
10 seamless continuation of the laddered procurement cycle as Duquesne Light
11 transitions from DSP IX to DSP X.

12
13 **Q. On April 8, 2020, the Company filed a Petition at its DSP VIII proceeding,**
14 **Docket P-2016-2543140, proposing to modify its DSP VIII procurement**
15 **schedule with regard to the 2022/2023 PJM planning year.⁹ How does the**
16 **Company's DSP IX proposal account for its requested modification to DSP**
17 **VIII?**

18 **A.** By the referenced Petition, the Company has proposed to modify the duration of
19 certain default supply contracts to be procured in its September 2020 auction from
20 24 months to 12 months, which will cover the period of December 2020 through
21 November 2021. As the Petition explains, the purpose of this proposed truncation
22 is to avoid inclusion of the 2022/2023 PJM planning year in the products to be

⁹ Docket No. P-2016-2543140, *Petition of Duquesne Light Company for Approval to Modify the Procurement Schedule for its Default Service Plan for the Period June 1, 2017, through May 31, 2021.*

1 procured in the September 2020 auction, because the PJM capacity price for that
2 planning year will likely still not be established by the time the auction occurs. If
3 the Company's proposal is approved by the Commission, a portion of the default
4 service load during the period from December 1, 2021 through November 30, 2022
5 will no longer be supplied through the Company's DSP VIII. In such event, the
6 Company will instead procure supply for that portion of the load for that period as
7 part of its DSP IX auction schedule. Specifically, as shown in Exhibit JP-1, 12.5%
8 of the default service supply for the Residential & Lighting and Small C&I classes
9 for delivery during the 12-month period covering December 1, 2021 through
10 November 30, 2022 will not be purchased in DSP VIII and instead will be
11 purchased as part of the September 2021 auction in DSP IX. This will increase the
12 total 12-month supply to be procured for those classes in the September 2021
13 auction to 37.5%. This represents the standard 25% procurement for 12 months
14 and the additional 12.5% procurement that is carried over from the September 2020
15 (DSP VIII) auction.

16
17 **Q. Does the Company's procurement plan include supplier load caps for**
18 **Residential & Lighting and Small C&I default service supply?**

19 A. Yes, the Company proposes to maintain a supplier load cap approved by the
20 Commission for DSP VIII. Specifically, a given supplier in a given auction cannot
21 be awarded more than 50% of the Residential & Lighting and Small C&I supply
22 tranches solicited on that auction date, rounded up to the nearest integer number of
23 tranches. See Exhibit JP-2.

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Medium C&I <200kW

Q. Please describe Duquesne Light’s proposed default supply procurement plan for Medium C&I <200kW customers.

A. The Medium C&I <200kW customer class includes non-residential customers with average monthly metered demands greater than or equal to 25 kW but less than 200 kW. The supply portfolio for this class will continue to be comprised entirely of three-month products, with 100% of the supply replaced every three months. The Medium C&I <200kW default service supply will continue to be split into four equal tranches of 25% of the total Medium C&I <200kW default service load in each hour. Accordingly, the Medium C&I <200kW default service rates will continue to change quarterly, on June 1st, September 1st, December 1st, and March 1st.

Q. Does the Company’s procurement plan include supplier load caps for Medium C&I <200kW default service supply?

A. No. The Company will continue the practice approved by the Commission for DSP VIII of not imposing a supplier load cap for the Medium C&I <200kW tranches. Since the delivery periods of the default service supply products for Medium C&I <200kW customers are only three months, the potential impact of a supplier default is reduced, so there is a reduced need for load caps to guard against the exposure resulting from a large supplier defaulting on its obligation.

1 **Q. Is Duquesne Light proposing any changes for Medium C&I <200kW**
2 **customers in DSP IX as compared to its existing DSP VIII Plan?**

3 A. There are no proposed changes to the supply portfolio or overall procurement
4 approach for Medium C&I <200kW customers. The Company recently lowered
5 the threshold for HPS eligibility for the Medium C&I class from ≥ 300 kW to ≥ 200
6 kW, on June 1, 2019. This relatively recent ≥ 200 kW threshold will be preserved
7 in DSP IX.

8

9 **HPS-Eligible**

10 **Q. Please describe the Company's proposed default service supply procurement**
11 **plan for HPS-Eligible customers.**

12 A. The HPS-Eligible customer class includes non-residential customers with average
13 monthly metered demands greater than or equal to 200 kW. HPS-Eligible
14 customers will continue to be offered default service rates based on day-ahead
15 hourly PJM energy market prices. Customers also will continue to be charged a
16 pass through of PJM capacity and ancillary services costs as well as the
17 administrative costs of providing hourly price service.

18

19 **Q. Is Duquesne Light proposing any changes with respect to its HPS-Eligible**
20 **customer default service plan?**

21 A. No. This plan will maintain the DSP VIII plan for the HPS-Eligible default
22 service product.

23

1 **Q. Does the Company's procurement plan include supplier load caps for HPS-**
2 **Eligible default service supply?**

3 A. No. The Company will continue the practice approved by the Commission for DSP
4 VIII of not imposing a supplier load cap for the HPS-Eligible tranches. Since the
5 default service supply products for HPS-Eligible customers are based on day-ahead
6 hourly market prices, the potential impact of a supplier default is reduced, so there
7 is a reduced need for load caps to guard against the exposure resulting from a large
8 supplier defaulting on its obligation.

9

10 **Solicitations**

11 **Q. Is Duquesne Light proposing to engage a third-party to assist in the auction**
12 **processes to obtain supply for the HPS-Eligible, Medium C&I <200kW, Small**
13 **C&I, and Residential & Lighting customer classes?**

14 A. Yes. Consistent with past practices, Duquesne Light proposes to engage an
15 independent third party to monitor and conduct the competitive solicitations,
16 including qualifying bidders, conducting bidder information sessions, receiving and
17 evaluating all bids, determining winning bidders, and reporting to the Commission.
18 This will help ensure the bid process is fair and independently monitored, and that
19 all information is provided to bidders in a non-discriminatory fashion. In DSP IX,
20 the independent evaluator will continue to assist in the auction process for all
21 customer classes.

22

1 **Q. Does Duquesne Light have a contingency plan to obtain supply for the HPS-**
2 **Eligible, Medium C&I <200kW, Small C&I, and Residential & Lighting**
3 **customer classes?**

4 A. Yes. In the event the Company receives bids for less than all tranches, the
5 Commission does not approve the results for all tranches, or a supplier defaults,
6 the Company will provide the balance of the default supply through purchases in
7 the PJM spot markets until such time that a different contingency plan is approved
8 by the Commission. The Company will submit to the Commission within fifteen
9 (15) days after any such occurrence an emergency plan to handle any default
10 service shortfall. All costs associated with implementing the contingency plan
11 will be included as part of the DSS described in the section below, "Calculation of
12 Rate."

13
14 **Q. In response to the Commission's request in the *January 2020 Secretarial***
15 ***Letter,*¹⁰ please explain how Duquesne Light manages the Peak Load**
16 **Contributions ("PLC") and Network Service Peak Load ("NSPL") values for**
17 **the HPS-Eligible, Medium C&I <200kW, Small C&I, and Residential &**
18 **Lighting customer classes.**

19 A. The Company calculates PLC and NSPL values based on the most precise
20 consumption data available. Duquesne Light has substantially completed
21 installing Advanced Metering Infrastructure ("AMI"), including interval meter

¹⁰ *Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms*, Docket No. M-2019-3007101, Secretarial Letter issued January 23, 2020 ("January 2020 Secretarial Letter").

1 functionality, across its service territory. This makes customers' interval, hourly
2 data available to the Company, which the Company uses to determine the
3 customer's PLC/NSPL value in the great majority of instances. Where an interval
4 read is not available for the specific PLC/NSPL hour(s), the Company uses daily
5 customer usage combined with a rate class/temperature profile to determine the
6 hourly estimate of the customer's peak load. If neither interval nor daily usage is
7 available, then the Company uses monthly billed usage to estimate the customer's
8 daily usage. In this case, the Company uses the previously mentioned profiling
9 methodology to determine the estimated peak usage. Finally, if all of these
10 methods are unavailable, then the average peak load of the customer's rate class is
11 used to determine the PLC/NSPL values. This method is most commonly used for
12 customers at a new premise with no existing load. For customers that get an
13 estimated PLC/NSPL through a daily or monthly profile, the Company has
14 implemented an annual review process to manually check the reasonability of the
15 estimate. This review is implemented by the Company to protect customers and
16 suppliers from significant capacity charges.

17
18 **Q. Why does Duquesne Light use a Zonal one coincidental peak hour to**
19 **determine the Network Service Peak Load ("NSPL") for its customers?**

20 **A.** The Duquesne Light system is planned for the highest peak hour of energy demand
21 for the year. This has historically provided an accurate representation of
22 transmission usage by the Company's customers during peak energy consumption

1 for the system. This is then reflected in the NSPL value assigned to customers,
2 which allocates transmission costs of the Company.

3
4 **III. THE DEFAULT SERVICE PLAN SATISFIES ACT 129 REQUIREMENTS**

5
6 **Q. Mr. Peoples, have you reviewed Act 129's provisions regarding default service**
7 **procurement?**

8 A. Yes, I have. The Act amended Section 2807(e)(3) of the Public Utility Code (66
9 Pa. C.S. §2807(e)(3)) by adding requirements to be applied to default service
10 procurement. These provisions include the use of "competitive procurement
11 processes" to obtain a "prudent mix" of contracts that is designed to ensure
12 "adequate and reliable service" at the "least cost to customers over time." In
13 approving a default service provider's plan, the Commission is required to make
14 specific findings that "the default service provider's plan includes prudent steps
15 necessary to negotiate favorable generation supply contracts . . . [and] includes
16 prudent steps necessary to obtain least cost generation supply contracts on a long-
17 term, short-term and spot market basis." The Act also specifies that the
18 Commission shall make a finding that "neither the default service provider nor its
19 affiliated interest has withheld from the market any generation supply in a manner
20 that violates federal law." The Act also gives the default service provider the right
21 to recover on a full and current basis all reasonable costs incurred under a
22 Commission-approved competitive procurement plan.

23

1 **Q. Do you believe that Duquesne Light's proposed DSP IX incorporates a**
2 **prudent mix of contracts, and includes prudent steps necessary to obtain least**
3 **cost generation supply contracts, as required by Section 2807(e)(3.4) and**
4 **Section 2807(e)(3.7) of the Act?**

5 A. Yes, in his direct testimony, Duquesne Light witness Mr. Fisher explains that DSP
6 IX satisfies these requirements.

7

8 **Q. Are there any other findings regarding Act 129 that the Company is requesting**
9 **the Commission to make as part of this proceeding?**

10 A. Yes. The Act specifies that the Commission shall make a finding that "neither the
11 default service provider nor its affiliated interest has withheld from the market any
12 generation supply in a manner that violates federal law." Duquesne Light owns no
13 generation resources, and has not withheld from the market any generation supply
14 in a manner that violates federal law. Duquesne Light does not discuss generation
15 market-related issues with its affiliates or outside entities. However, Duquesne
16 Light can affirmatively state that there has been no determination by a court or
17 regulatory agency of competent jurisdiction that any of its affiliates have withheld
18 from the wholesale energy market any generation supply in a manner that violates
19 federal law. Consequently, the Company requests that the Commission make a
20 finding that neither the default service provider nor its affiliated interest has
21 withheld from the market any generation supply in a manner that violates federal
22 law.

23

1 **IV. SUPPLIER MASTER AGREEMENT**

2
3 **Q. Is Duquesne Light proposing to use the same default service SMA for DSP**
4 **IX that it is using for DSP VIII?**

5 A. The Company will continue to use the SMA template that was developed by the
6 Procurement Collaboration Working Group.¹¹ However, the Company will make
7 a few modifications to the SMA approved in DSP VIII for DSP IX in order to (a)
8 capture nomenclature changes that have been implemented at PJM in the past four
9 years, (b) expand the assignment provisions, and (c) make various other
10 housekeeping revisions for purposes of clarity. One such proposed revision is to
11 remove a form “PJM Declaration of Authority” as an exhibit to the SMA, because
12 PJM now administers Declarations of Authority directly with parties via electronic
13 communications, and Duquesne Light will utilize the latest version provided by
14 PJM.¹² A redlined SMA highlighting these changes is presented in Exhibit JP-3.

15
16 **Q. Why is Duquesne Light proposing to make these modifications?**

17 A. These changes are necessary to further enhance and improve the auction process,
18 and/or to remain current with modifications that PJM or the PUC have made in the
19 past four years.

¹¹ In the Commission’s Default Service End State Order in the Investigation of Pennsylvania’s Retail Electricity Market, the Commission directed the Office of Competitive Markets Oversight to create a Procurement Collaboration Working Group. This working group was tasked with developing a uniform default service SMA for the EDCs in Pennsylvania. Duquesne Light actively participated in the Procurement Collaboration Working Group, including the development of the SMA. (*Investigation of Pennsylvania’s Retail Electricity Market: End State of Default Service*, Docket No. I-2011-2237952 (Order entered February 15, 2013), p. 42.

¹² See <https://www.pjm.com/about-pjm/member-services.aspx> (providing a link to a “non-executable sample” Declaration of Authority).

1

2 **Q. How is the SMA structured?**

3 A. The main body of the SMA consists of a uniform template. Individual EDCs, such
4 as Duquesne Light, specify unique requirements associated with their default
5 service supply in appendices to the SMA. Such requirements relate to supply
6 product term length and size, credit ratings and unsecured credit thresholds, mark-
7 to-market calculations, delivery points, responsibility for various PJM line item
8 charges, and AEPS compliance.

9

10 **Q. Will wholesale suppliers be allowed to propose modifications to the SMA once
11 it is approved?**

12 A. No, they will not. Each supplier will have the same rights and obligations when
13 supplying default service load. Using an identical SMA across all suppliers allows
14 for a competitive bidding process in which winning suppliers are determined solely
15 based on lowest price.

16

17 **V. ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM**

18

19 **Q. Please briefly describe the Company's proposed Electric Vehicle Time-of-Use
20 ("EV-TOU") Pilot Program.**

21 A. The Company is proposing to offer, to Residential, Small C&I, and Medium C&I
22 <200kW customers eligible for Rider No. 8 who own or lease a plug-in battery
23 electric vehicle or a plug-in hybrid electric vehicle (collectively "EV") or offer

1 charging infrastructure to employees or visitors, the opportunity to receive their
2 electric supply on a time-of-use (“TOU”) basis.¹³ Duquesne Light witnesses Ogden
3 and Scholl describe this program in detail. Customers enrolled in the EV-TOU
4 Pilot Program will be supplied by the default service suppliers, and rates for this
5 service will be developed as explained in witness Mr. Ogden’s testimony.

6
7 **VI. ALTERNATIVE ENERGY CREDIT PROCUREMENT**

8 **Q. How does the Company currently meet its Alternative Energy Credits**
9 **(“AECs”) obligations under the Pennsylvania Alternative Energy Portfolio**
10 **Standard?**

11 **A.** The Company is responsible for the AEC obligations only associated with default
12 service load.¹⁴ The Company enters into SMAs with the winning full
13 requirements default service suppliers serving Residential & Lighting, Small C&I,
14 and Medium C&I <200kW, and HPS customers. Each winning supplier is
15 responsible for its percentage share of the AEC obligations based on the number
16 of tranches won for each customer class. These suppliers, in aggregate, are
17 responsible for meeting 100% of the Company’s AEC obligations associated with
18 these customer classes.

19
20 **Q. Is the Company proposing any changes to its AEC procurement**
21 **methodology?**

¹³ Customers eligible for Rider No. 9 – HPS will not be eligible for the EV-TOU Pilot Program. Unmetered accounts on Rider No. 8 also are not eligible for EV-TOU rates.

¹⁴ EGSs are responsible for meeting the AEC obligations associated with the customers they serve.

1 A. Yes. While the Company anticipates that the majority of its AEC procurements
2 will follow the same process as in DSP VIII as outlined above, the Company is
3 also proposing to conduct a competitive solicitation for prospective solar
4 developers, with the potential to enter into a power purchase agreement (“PPA”)
5 for a portion of the solar facility’s output. The solar AECs procured through such
6 PPA, if any, would offset the solar AECs the Company would otherwise procure
7 from wholesale default service suppliers. Company witness C. James Davis
8 discusses the Company’s solar proposal in DLC Statement No. 1.

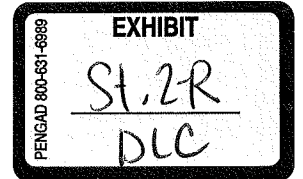
9

10 **Q. Does this conclude your direct testimony?**

11 A. Yes, it does.

DUQUESNE LIGHT STATEMENT NO. 2-R

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**



Petition Of Duquesne Light Company :
For Approval Of Default Service Plan : Docket No. P-2020-3019522
For The Period June 1, 2021 Through :
May 31, 2025 :

**REBUTTAL TESTIMONY OF
JOHN A. PEOPLES**

Dated: August 14, 2020

1 **I. Introduction**

2 **Q. Please state your full name and business address.**

3 A. My name is John A. Peoples. My business address is 411 7th Avenue, Pittsburgh, PA 15219.

4

5 **Q. What is your position at Duquesne Light Company?**

6 A. I am the Manager of Energy Procurements and Settlements for Duquesne Light Company
7 (“Duquesne Light” or “Company”).

8

9 **Q. Did you previously submit direct testimony in this proceeding on behalf of the**
10 **Company?**

11 A. Yes. I am the same John A. Peoples that submitted my direct testimony, Statement No. 2,
12 on April 20, 2020, with the Company’s initial filing.

13

14 **Q. What is the purpose of your rebuttal testimony?**

15 A. My rebuttal testimony will address Christopher H. Kallaher’s criticism, on behalf of a
16 coalition of electric generation suppliers (EGSs) that includes Direct Energy Services,
17 Interstate Gas Supply, Inc., Shipley Choice LLC, NRG Energy, Inc, Vistra Energy Corp.,
18 ENGIE Resources LLC., and WGL Energy Services, Inc. (“EGS Parties”), that Duquesne
19 Light failed to address recent Federal Energy Regulatory Committee (FERC) orders
20 regarding PJM’s Capacity Market Minimum Price Offer Rule (MOPR). I also will respond
21 to the comments and recommendations made by the Office of Consumer Advocates (OCA)

1 witness Dr. Serhan Ogur regarding the role of the independent auction monitor for the
2 default supply auctions, as it pertains to the PJM MOPR proceeding at the FERC. Finally,
3 I will respond to Mr. Kallaher's concern that the Company's EV Time-of-Use Pilot Program
4 will impede suppliers who may already offer such programs or be planning such programs.
5

6 **II. Minimum Price Offer Rule**

7 **Q. EGS Parties witness Kallaher expresses concern that, "it appears that Duquesne has
8 not addressed the critical matter of the possible application of the minimum offer price
9 rule to state default service auctions such as those used by Duquesne to source supply
10 for its default service product."¹ What is your response?**

11 **A.** The Company has not addressed the FERC MOPR in its DSP IX Petition for two reasons:
12 1) the rulemaking proceeding is still pending before the FERC and therefore the rules and
13 potential implications are subject to change, and 2) the FERC MOPR is directed at PJM and
14 generation resources that participate in the PJM capacity market – and it is not clear at this
15 time what role, if any, will be required of EDCs.²
16

17 **Q. Do you agree with Mr. Kallaher's recommendation that the Commission should direct
18 Duquesne Light to make a supplemental filing to specify the manner in which the**

¹ EGS Parties St. No. 1, p. 10.

² Mr. Kallaher acknowledges that it is somewhat understandable that Duquesne Light did not address this in its DSP filing, given that the issue has not been completely resolved by FERC and because FERC has yet to approve PJM's compliance filing. Mr. Kallaher also recognizes the uncertainty in the "possible application of the minimum offer price rule to state default service auctions" and the "implications, if any," for Duquesne Light. (EGS Parties, Statement No. 1, pp. 10 and 12, emphasis added.)

1 **Company’s default service program meets PJM’s requirements for being the “result**
2 **of a non-discriminatory and competitive bidding process?”³**

3 A. No. Mr. Kallaher’s recommendation to require a supplemental filing is unnecessary and
4 inappropriate. First, the FERC proceeding is not yet final. Second, it is not at all clear how
5 the MOPR would be applied, if at all, to EDCs, as default service providers. As Mr. Kallaher
6 notes, the FERC MOPR applies to “PJM and Capacity Market Sellers.”⁴ Duquesne Light is
7 neither of these things. The Company, as a default service provider, is a “buyer” of full
8 requirements wholesale supply. Therefore, the MOPR may not require any regulatory
9 filings on the part of the Company. Third, a supplemental filing is unnecessary since, as I
10 describe further below, the Company’s independent auction monitor is able to certify that
11 the Company’s DSP IX solicitations represent a resource-neutral, non-discriminatory and
12 competitive bidding process. For these reasons, the EGS Parties’ recommendation to require
13 a supplemental filing should be rejected by the Commission.

14
15 **Q. Please summarize OCA witness Ogur’s recommendation regarding the role of the**
16 **independent auction monitor as it pertains to the PJM Capacity Market MOPR**
17 **proceeding at FERC.**

18 A. Witness Ogur on behalf of the OCA also posits that the MOPR proceeding may have an
19 impact on default service auctions. Dr. Ogur argues that state default service auctions should
20 meet four criteria to be exempt from the definition of a state subsidy.⁵ Dr. Ogur agrees that

³ EGS Parties St. No. 1, pp. 12-13.

⁴ EGS Parties St. No. 1, p. 11.

⁵ OCA St. No. 1, p. 9, line 23 – p. 10, line 10 (emphasis added):

1 the Company's DSP IX satisfies at least three of these criteria, but opines that it does "not
2 necessarily" meet the criterion that the Company's independent auction monitor certify that
3 the default supply procurement process is resource-neutral, non-discriminatory and
4 competitive. Dr. Ogur states, "DLC's proposed role for the independent auction monitor
5 does not include certifying that the procurement process is designed and conducted in
6 accordance with a resource-neutral, non-discriminatory and competitive bidding process."⁶
7 Dr. Ogur recommends the independent auction monitor role be expanded to remediate this
8 concern. Dr. Ogur recommends that the independent auction monitor's certification be
9 made available to PJM, PJM's Independent Market Monitor, and to FERC, as needed.

10
11 **Q. Do you believe the Company's current DSP VIII and proposed DSP IX solicitations**
12 **represent a resource-neutral, non-discriminatory and competitive bidding process?**

13 **A.** Yes. The Company would respectfully submit that the current role of the independent
14 auction monitor already includes, implicitly, the certification requirements that witness Ogur

First, the state default service auction must be subject to oversight by a consultant or manager, independent of the Market Participants, who certifies that the auction was conducted through a non-discriminatory and competitive bidding process. **Second**, the default service auction must not place any conditions based on the ownership, location, affiliation, fuel type, technology, or emissions, of any resources or supply. **Third**, the default service auction must not result in any contracts between the Entity Providing Supply Services to Default Retail Service Provider and the electric distribution company that imposes any conditions that would require any upstream bilateral transactions to be sourced from any specific Capacity Resource or resource type in order to satisfy the retail supply obligations. **Fourth**, retail customers must have the option to elect a competitive retail supplier and effectively by-pass any supply charges that are a result of the state default service auction awards.

⁶ OCA St. No. 1, p. 11.

1 is recommending. However, the Company appreciates the identification of the MOPR and
2 state subsidy concerns that both Dr. Ogur and Mr. Kallaher have raised in their testimonies.

3
4 **Q. Do you propose to expand the role of the independent auction monitor to include**
5 **certifying that Duquesne Light's Default Service Supply solicitations are conducted**
6 **through a resource-neutral, non-discriminatory and competitive bidding process?**

7 A. Yes. Beginning with the Company's September, 2020, Default Service Supply procurement
8 and extending through DSP IX, the Company's independent auction monitor will certify
9 that the solicitation was conducted through a resource-neutral, non-discriminatory and
10 competitive bidding process. The Company and the independent auction monitor will
11 include language in the Company's post-auction notification letter to the Commission that
12 memorializes this certification.

13
14 **Q. Will the Company make the certification available to PJM, PJM's Independent**
15 **Market Monitor, and to FERC, as needed?**

16 A. Yes.

1 **III. EV-TOU Rate Pilot Program**

2 **Q. How do you respond to Mr. Kallaher's recommendation that Duquesne Light issue an**
3 **RFI for proposals from competitive entities to enhance the development of the EV**
4 **market in Duquesne Light's service area?⁷**

5 A. As an initial matter, I note that Mr. Kallaher's proposed RFI is poorly defined, which
6 Company witness Katherine Scholl discusses in further detail in her rebuttal testimony, DLC
7 Statement No. 5-R. To the extent Mr. Kallaher envisions an RFP that would procure an EV-
8 TOU supply product from EGSs, the Company conducted similar RFPs before. As part of
9 its DSP VII, the Company conducted an RFP for TOU supply that covered the delivery
10 period June 1, 2016 through May 31, 2017. The TOU RFP obtained two EGSs that provided
11 TOU rates for Residential customers. The Company promoted the TOU rate offerings that
12 were marketed by the two EGSs on the Company's website. In DSP VIII, the Company
13 planned to continue to encourage EGS-supplied TOU offers beyond May 31, 2017, and
14 planned to expand the TOU offers to Small C&I and Medium C&I customers.⁸ However,
15 the EGSs that had won the RFP opted to stop supplying the TOU product.

16
17 **Q. Mr. Kallaher argues that the Company's EV-TOU Pilot Program will impede**
18 **suppliers who may already offer such programs or be planning such programs.⁹ What**
19 **is your response?**

⁷ EGS Parties St. No. 1, p.22.

⁸ Petition of Duquesne Light Company for Approval of Default Service Plan for the Period June 1, 2017 Through May 31, 2021, Docket P-2016-2543140, Duquesne Light Statement No. 2, May 2, 2016, pp. 24-26.

⁹ EGS Parties St. No. 1, p.21.

1 A. The Company provides EGSs with the ability to offer Time-of-Use rates to residential
2 customers. EGSs capable of providing “bill ready” or “dual bill” services are able to offer
3 a myriad of TOU rates to customers with different time periods specified at different price
4 levels. This allows EGSs more flexibility to craft products based on different time periods
5 tailored to the needs of customers. To the extent EGSs believe that more effective TOU
6 options might exist than the Company’s proposed EV-TOU rates, EGS remain free to make
7 such offers in the competitive market.

8

9 **Q. Is Mr. Kallaher aware of any electric generation suppliers in Pennsylvania that offer**
10 **an electric vehicle-specific time-of-use rate or program?**

11 A. No.¹⁰

12

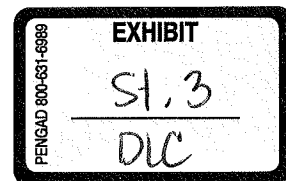
13 **Q. Does this conclude your rebuttal testimony?**

14 A. Yes, at this time.

¹⁰ Discovery Response, EGS Parties I-1 (included in Exhibit KMS-1R, sponsored by Company witness Scholl).

DUQUESNE LIGHT STATEMENT NO. 3

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**



**Petition Of Duquesne Light Company
For Approval Of Default Service Plan
For The Period June 1, 2021 Through
May 31, 2025**

:
:
:
:
:

Docket No. P-2020- _____

**DIRECT TESTIMONY OF
SCOTT G. FISHER**

Dated: April 20, 2020

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1 **I. Introduction**

2 **Q. Please state your name and business address.**

3 A. My name is Scott G. Fisher. My business address is 30 Monument Square, Suite 105,
4 Concord, Massachusetts, 01742.

5

6 **Q. What is your current position?**

7 A. I am a Partner with The NorthBridge Group, Inc. (“NorthBridge”), an economic and
8 strategic consulting firm serving the electric and natural gas industries. NorthBridge has
9 advised Duquesne Light Company (“Duquesne Light” or the “Company”) on matters
10 relevant to its default service plans (“DSP” or “default service” or “POLR”) for many
11 years. In these efforts, I have advised Duquesne Light on matters pertaining to both default
12 service supply product portfolio and rate design.

13

14 **Q. Please summarize your professional and academic background.**

15 A. Since joining NorthBridge in 1998, I have advised companies in the electric industry on
16 decisions related to risk management, asset valuation and portfolio management, product
17 pricing, contract negotiations, regulatory affairs, supply procurement, rate design,
18 emerging technologies, public policy formulation and negotiations, and overall corporate
19 strategy. I also have served as an expert witness on several of these topics, particularly
20 with respect to default service supply procurement and ratemaking, in state public utility
21 commission proceedings. Before joining NorthBridge, I was a consultant at Strategic
22 Decisions Group, a management consulting firm serving a variety of industries. I received

1 an A.B. from Dartmouth College and a B.E. from the Thayer School of Engineering at
2 Dartmouth College, with high honors. In addition, I received an M.S. in Engineering-
3 Economic Systems from Stanford University and an M.B.A. from the Tuck School of
4 Business at Dartmouth College, with high honors. I presently serve as a guest lecturer at
5 the Tuck School of Business on energy industry matters.

6
7 **Q. Have you testified previously before the Pennsylvania Public Utility Commission**
8 **(“Commission”)?**

9 A. Yes, I testified in Docket No. P-2012-2301664, Petition of Duquesne Light Company for
10 Approval of a Default Service Program and Procurement Plan for the Period June 1, 2013
11 through May 31, 2015.¹ I also testified in Docket No. P-2008-2062739, Petition of PECO
12 Energy Company for Approval of its Default Service Program and Rate Mitigation Plan,²
13 Docket No. P-2012-2283641, Petition of PECO Energy Company for Approval of its
14 Default Service Program,³ Docket No. P-2014-2409362, Petition of PECO Energy
15 Company for Approval of its Default Service Program for the Period from June 1, 2015
16 through May 31, 2017,⁴ and Docket No. P-2016-2534980, Petition of PECO Energy

¹ See *Petition of Duquesne Light Company for Approval of Default Service Plan For the Period June 1, 2013 Through May 31, 2015*, Docket No. P-2012-2301664 (Order entered January 25, 2013).

² See *Petition of PECO Energy Company for Approval of Its Default Service Program and Rate Mitigation Plan*, Docket No. P-2008-2062739 (Order entered June 2, 2009).

³ See *Petition of PECO Energy Company for Approval of Its Default Service Program*, Docket No. P-2012-2283641 (Order entered October 12, 2012).

⁴ See *Petition of PECO Energy Company for Approval of Its Default Service Program for the Period from June 1, 2015 through May 31, 2017*, Docket No. P-2014-2409362 (Order entered December 4, 2014).

1 Company for Approval of its Default Service Program for the Period from June 1, 2017
2 through May 31, 2021.⁵

3
4 **Q. What is the purpose of your direct testimony?**

5 A. The purpose of my testimony is to evaluate Duquesne Light's proposed default service plan
6 (the "Default Service Plan" or "Plan" or "DSP IX") to procure supply for default service
7 customers for the period beginning June 1, 2021, and ending May 31, 2025. My direct
8 testimony is divided into two parts. First, I briefly provide some background information
9 and observations pertaining to Duquesne Light's current default service plan. Second, I
10 support Duquesne Light's overall design for DSP IX, especially in light of Act 129's (the
11 "Act") requirement that the plan include a "prudent mix" of contracts designed to ensure
12 the least cost to customers over time.⁶

13
14 **Q. Please summarize your conclusions.**

15 A. I have two main conclusions.

- 16 1. The basic default service model used by Duquesne Light has been appropriately
17 tailored to provide price stability benefits to customers while supporting the
18 competitive retail electricity market.

⁵ See *Petition of PECO Energy Company for Approval of Its Default Service Program for the Period from June 1, 2017 through May 31, 2021*, Docket No. P-2016-2534980 (Order entered December 8, 2016) ("DSP IV Order").

⁶ 66 Pa. C.S. § 2807(e)(3.4).

1 2. DSP IX satisfies the requirements of Act 129 by incorporating a prudent mix of
2 contracts designed to ensure least cost to customers over time, taking into account
3 the benefits of price stability, and by including prudent steps necessary to obtain
4 least cost generation supply.

5 Each of these conclusions is described in more detail below.

6
7 **II. The Basic Default Service Model Used by Duquesne Light Has Been Appropriately**
8 **Tailored to Provide Price Stability Benefits to Customers While Supporting the**
9 **Competitive Retail Electricity Market**

10 **Q. Please provide a high-level overview of Duquesne Light’s default service approach.**

11 A. Duquesne Light has adopted tailored supply portfolios for different customer classes that
12 are designed to ensure the least cost to customers over time, taking into account benefits
13 of price stability. Duquesne Light’s largest customers are offered default service rates
14 based on day-ahead hourly market prices, while the supply approaches for smaller
15 customers provide them with more stable default service rates. A greater degree of default
16 service rate stability is appropriate for smaller customers, as they are less likely to have the
17 time, incentive, knowledge, sophistication, or resources to elect an alternative electric
18 generation supplier (“EGS” or “competitive retail supplier”) offering that provides the
19 price stability at reasonable levels that they seek. I am advised by counsel that Act 129 is
20 consistent with this position, as it requires that a default service plan include a “prudent
21 mix” of contracts that considers any benefits of price stability.⁷

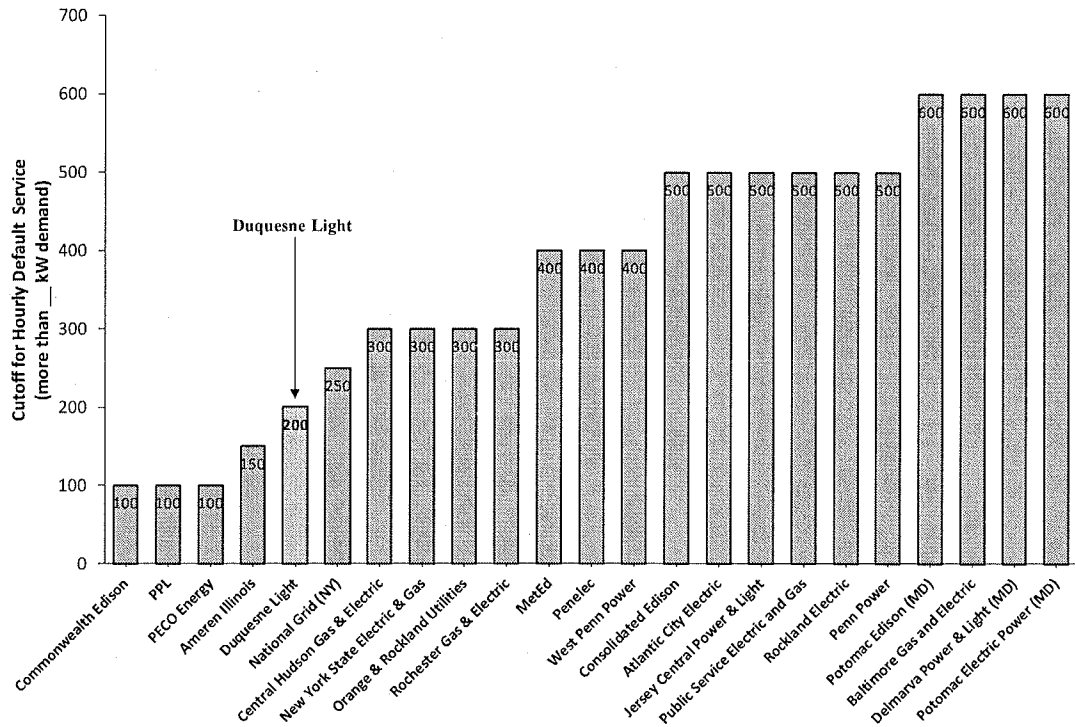
⁷ 66 Pa. C.S. § 2807(e)(3.4), and Act 129 of 2008 (Preamble).

1

2 **Q. Please characterize Duquesne Light's delineation of customers who are offered**
3 **default service rates based on day-ahead hourly market prices versus those who are**
4 **offered more stable default service rates.**

5 A. Duquesne Light was one of the first utilities in the nation to offer hourly-priced default
6 service to all customers with metered demands greater than or equal to 300 kW.
7 Furthermore, as shown in the following figure, with its recent lowering of the kilowatt
8 demand threshold to 200 kW, Duquesne Light continues to be among the utilities with the
9 lowest demand thresholds for hourly-priced default service in the United States.

1 **Figure 1 Duquesne Light Has One of the Lower kW Thresholds for Hourly Price**
 2 **Default Service for Commercial and Industrial Customers in the United**
 3 **States**



4
 5 Duquesne Light currently offers the following customers default service rates based on
 6 day-ahead hourly market prices:⁸

- 7
- Medium C&I ≥200kW – Customers served under rate schedules GS/GM and GMH with average monthly metered demands that are at least 200 kW.
 - Large C&I – Customers served under rate schedules GL, GLH, L, and HVPS.
- 9

⁸ For the purposes of my testimony, I refer to these customers as “HPS-Eligible,” as they are eligible for Rider No. 9 – Day-Ahead HPS.

1 As a result, the default service rates offered to about half of Duquesne Light's total system
2 load are based on day-ahead hourly market prices. As of March 2020, 94% of this load is
3 receiving supply from an EGS.

4
5 **Q. How does Duquesne Light provide more stable default service rates to its customers
6 who are not offered default service rates based on day-ahead hourly market prices?**

7 A. Duquesne Light relies on open solicitations for fixed-price full requirements ("FPFR")
8 default service supply products for its customers who are not offered default service rates
9 based on day-ahead hourly market prices (i.e., Residential & Lighting, Small C&I, and
10 Medium C&I <200kW customer classes),⁹ and it passes through the costs of those products
11 to customers. Furthermore, Duquesne Light tailors the specific mix of products to the
12 needs of each customer class.

13
14 **Q. Mr. Fisher, please describe the characteristics of the FPFR supply products that
15 Duquesne Light procures through open solicitations for its Residential & Lighting,
16 Small C&I, and Medium C&I <200kW default service customers.**

17 A. A FPFR default service supply product obligates the seller of the product to satisfy a
18 specified percentage of all of the default service customers' supply requirements in every
19 hour of the delivery period, regardless of the default service customers' instantaneous

⁹ Residential customers are those served under rate schedules RS, RH and RA. Lighting customers are those served under rate schedules AL, SE, SM, SH, and PAL. Small C&I customers are those with average monthly metered demands less than 25 kW served under rate schedules GS/GM, GMH and UMS. Medium C&I <200kW customers are those served under rate schedules GS/GM and GMH with average monthly metered demands that are at least 25 kW but less than 200kW.

1 changes in energy consumption, regardless of how frequently customers switch to or from
2 default service, and regardless of how the seller's cost to satisfy its supply obligation may
3 change. The seller is paid a predetermined price per megawatt-hour for this service. The
4 FPCR products that Duquesne Light procures include the generation components required
5 to supply Duquesne Light's default service customers, including energy, capacity, and
6 ancillary services, as well as alternative energy credits required for compliance with
7 Pennsylvania's Alternative Energy Portfolio Standards ("AEPS") Act. In Duquesne
8 Light's solicitations for FPCR products, qualified bidders compete with one another by
9 submitting the prices at which they are willing to provide the full requirements default
10 service supply, and the suppliers with the lowest prices are selected upon approval of the
11 procurement by the Commission. Furthermore, additional price stability benefits can be
12 achieved for certain customer classes if the FPCR products are procured at different times
13 and with overlapping delivery periods. This approach limits the percentage of supply that
14 must be solicited or replaced at any given time or in any given short period of time, thereby
15 reducing the likelihood of significant rate changes due to adverse circumstances or market
16 conditions at any given time.

17
18 **Q. In its January 2020 Secretarial Letter,¹⁰ the Commission requested that "...the large**
19 **EDCs include in their upcoming DSP filings a 10 year history of their PTC**

¹⁰ Secretarial Letter, *Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms*, Docket M-2019-3007101, January 23, 2020 ("*January 2020 Secretarial Letter*").

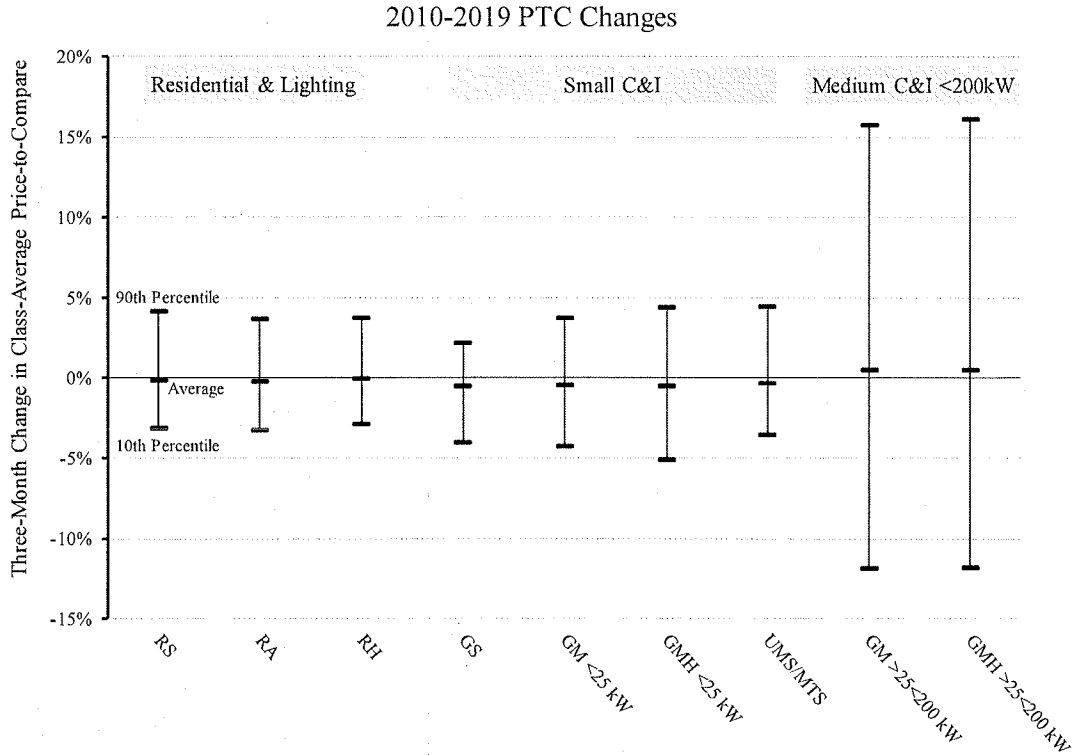
1 **changes...”¹¹ Please provide a statistical summary of Duquesne Light’s Price-to-**
2 **Compare (“PTC”) changes over the past ten years.**

3 A. Figure 2 provides a statistical summary of Duquesne Light’s class-average PTC changes
4 during the 2010-2019 period for the major rate schedules that are currently offered default
5 service rates based on FPCR supply products.¹² Throughout this time period, percentage
6 changes in the PTC from one date to the date three months later were measured. Figure 2
7 illustrates the PTC volatility for each rate schedule by providing the 10th and 90th
8 percentiles of the percentage changes.

¹¹ *January 2020 Secretarial Letter*, p. 11.

¹² Exhibit SGF-1 contains the underlying data used to develop Figure 2, and it shows the class-average PTC changes over ten years.

1 **Figure 2 Three-Month Changes in Duquesne Light's Prices-to-Compare during**
 2 **2010-2019**

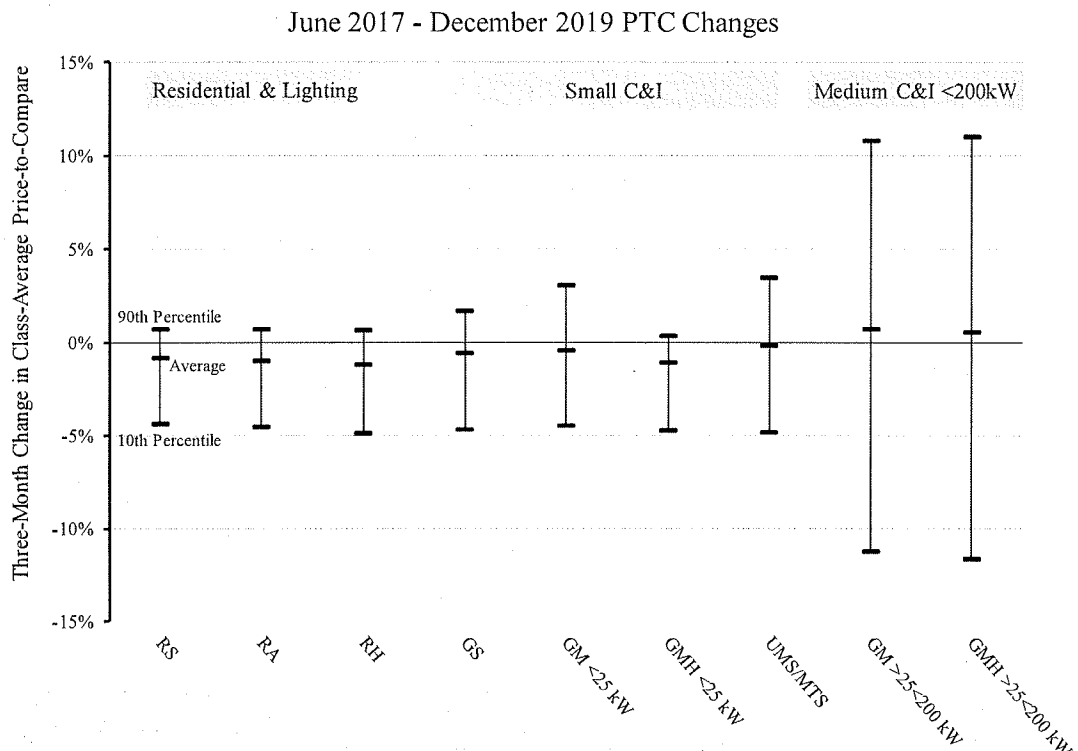


3
 4 As shown in Figure 2, Duquesne Light's historical default service plans have been
 5 effective in providing the Residential & Lighting and Small C&I customer classes with
 6 greater default service price stability than that provided to the Medium C&I <200kW
 7 customer class. This is appropriate, given smaller customers' lower likelihoods of having
 8 the time, incentive, knowledge, sophistication, or resources to elect an EGS offering that
 9 provides the price stability at reasonable levels that they seek.

10 While Figure 2 provides a statistical summary of Duquesne Light's class-average
 11 PTC changes during the 2010-2019 period, the product mixes and rate change frequencies
 12 changed over this time period. Additional information that is relevant to DSP IX can be

1 provided by studying the PTC changes during the DSP VIII period (the period starting June
 2 2017), as Duquesne is proposing to continue the basic procurement strategy that was
 3 established in DSP VIII. Accordingly, Figure 3 provides a statistical summary of
 4 Duquesne Light's class-average PTC changes during the DSP VIII period.

5 **Figure 3 Three-Month Changes in Duquesne Light's Prices-to-Compare during**
 6 **the DSP VIII Period**



7
 8 The results depicted in Figure 3 are similar to the results depicted in Figure 2.
 9 Specifically, Duquesne Light's DSP VIII has been effective in providing the Residential &
 10 Lighting and Small C&I customer classes with greater default service price stability than
 11 that provided to the Medium C&I <200kW customer class. Since DSP IX will continue
 12 the basic procurement strategy that was established in DSP VIII, Figure 3 supports the

1 conclusion that the benefits of price stability for smaller customers, who are more likely to
2 rely on default service to provide these benefits, will be achieved under DSP IX.

3
4 **Q. How does Duquesne Light's default service approach provide the benefits of price**
5 **stability to default service customers in the Residential & Lighting and Small C&I**
6 **customer classes?**

7 A. The mix of one-year and two-year FPCR products in Duquesne Light's Residential &
8 Lighting and Small C&I default service supply portfolios, and the semi-annual overlapping
9 of their delivery periods, provides these customers with additional assurances of price
10 stability. This is true for several reasons. First, the mix of fixed-price one-year and two-
11 year products smooths out rate fluctuations over time. Second, 37.5% of the Residential
12 & Lighting and Small C&I default service supply is replaced every six months,¹³ thereby
13 mitigating the impacts of adverse circumstances or market conditions at any given time,
14 while updating prices over time. Third, Duquesne Light's reliance on supply purchased on
15 four different solicitation dates to determine the default service supply rate at any given
16 point in time, versus a plan in which the default service supply rate at any given point in
17 time is based on supply procured on fewer solicitation dates, provides Residential &
18 Lighting and Small C&I default service customers with greater rate stability. Finally,
19 Duquesne Light's approach does not require that 100% of the supply be replaced at the end

¹³ Duquesne Light conducts solicitations every six months, but in each solicitation 25% of the supply requirement is procured in the form of one-year products and 12.5% of the supply requirement is procured in the form of two-year products.

1 of the DSP period (a “hard stop”), which would expose Residential & Lighting and Small
2 C&I customers to unnecessary rate instability and risks.

3
4 **Q. In its January 2020 Secretarial Letter, the Commission stated that “...PTC change**
5 **intervals should also be reviewed in the upcoming round of DSP proceedings,”¹⁴ and**
6 **it specifically requested that “...the large EDCs include in their upcoming DSP filings**
7 **a 10 year history of their PTC changes and assess the benefits of a 6-month PTC**
8 **change compared to a 3-month PTC change.”¹⁵ Have you conducted an analysis to**
9 **assess the benefits of a 6-month PTC change compared to a 3-month PTC change?**

10 A. Yes. Using data from 2010-2019, a ten-year historical period consistent with the
11 Commission’s request, I simulated and compared the default service supply rate stability
12 of the following default service approaches: (a) Duquesne Light’s proposed default service
13 supply portfolios (for Residential & Lighting and Small C&I) of 50% overlapping one-
14 year products and 50% overlapping two-year products with six-month PTC changes, (b)
15 non-overlapping six-month supply products with six-month PTC changes, and (c) non-
16 overlapping three-month supply products with three-month PTC changes. To simulate the
17 different default service supply product portfolios, I applied forward energy prices and
18 capacity prices during 2010-2019. For a given default service supply product portfolio,
19 the forward energy prices and capacity prices associated with the portfolio’s supply product
20 procurement dates and delivery periods were applied.¹⁶ In all cases, I assumed that supply

¹⁴ *January 2020 Secretarial Letter*, p. 8.

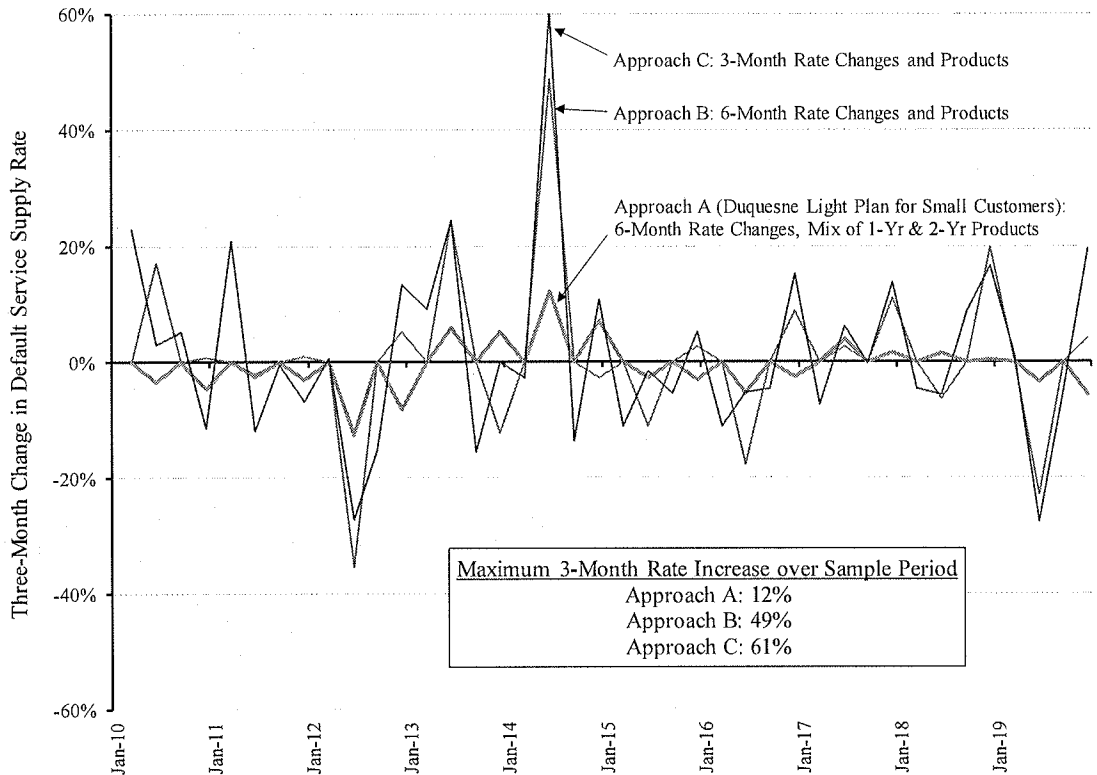
¹⁵ *January 2020 Secretarial Letter*, p. 11.

¹⁶ I relied on forward block energy prices for PJM Western Hub as reported by the New York Mercantile Exchange (“NYMEX”). NYMEX prices were provided by ABB Velocity Suite. A historical basis adjustment to the Duquesne

1 products are procured approximately 2.5 months before the start of delivery. Over the ten-
2 year period, I calculated the percentage changes in the PTC from one date to the date three
3 months later for each of the three default service supply portfolios. Figure 4 depicts the
4 results of this analysis.

Light Zone was applied. I then added a load shaping adjustment to reflect the fact that market prices are generally higher during hours in which customer loads are higher. The load shaping adjustments are based on actual historical percentage differences between load-weighted hourly energy prices and straight-average hourly energy prices. For capacity, I applied PJM-published Zonal Net Load Prices to megawatt quantities of required capacity. For the purposes of this analysis, the other, smaller contributions to default service supply rates (e.g., ancillary services and other PJM line items allocated to the FPCR product suppliers, Alternative Energy Credits, residual compensation required by FPCR product suppliers to assume various costs and risks, any approved adders that are required to cover administrative costs, distribution line losses, Pennsylvania Gross Receipts Tax, etc.) were assumed to have a negligible impact on the percentage change in the PTC from period to period. For illustrative purposes, I assumed that collections from customers match underlying costs, so reconciliations are minimal.

1 **Figure 4 Duquesne Light's DSP IX Plan Offers Residential & Lighting and Small**
 2 **C&I Customers Greater Assurances of Price Stability than Plans with**
 3 **Six-Month or Three-Month Rates and Matching Six-Month or Three-**
 4 **Month Supply Products**



5
 6 As indicated by Figure 4, Duquesne Light's default service approach provides
 7 significant price stability benefits to Residential & Lighting and Small C&I default service
 8 customers, relative to the approaches involving three-month or six-month rates and
 9 matching three-month or six-month supply products. The greater price stability achieved
 10 by Duquesne Light's default service approach is primarily due to the inclusion of
 11 overlapping, longer-term FPCR products, procured at different times, without any "hard
 12 stops" in supply.

1 **Q. Do you have any other comments to add about the results of your analyses?**

2 A. Yes. It is important to recognize that actual future rate volatility could be even greater than
3 what I show in my analyses based on actual market prices experienced in recent years.
4 Indeed, the single path of energy and capacity prices during the historical period is unlikely
5 to reflect the universe of potential market outcomes that could occur in the future.
6 Furthermore, my simulation does not include all drivers of rate uncertainty. These facts
7 underscore the importance of adopting a default service approach that is designed to
8 provide significant price stability benefits to Residential & Lighting and Small C&I default
9 service customers.

10

11 **Q. Have Duquesne Light's solicitations for FPFR supply products been successful?**

12 A. Yes. Multiple suppliers have participated in each of the FPFR product solicitations, and
13 the Commission has approved the bid results for all of the FPFR default service supply
14 product tranches that have been solicited.¹⁷ These facts indicate that suppliers understand
15 the products being solicited and are willing to compete to provide those products. This is
16 beneficial for customers and helps to ensure that the winning prices are the lowest possible
17 for the products being solicited. When bidders are faced with a high likelihood that other
18 bidders are also competing on the basis of price for the same product, they have the
19 incentive to submit their lowest possible price in order to avoid being underpriced by
20 another bidder.

¹⁷ The period observed in making this statement is the period since 2017, when Duquesne Light first started using the specific auction process that it currently employs.

1
2 **Q. Have Duquesne Light's default service plans supported the competitive retail**
3 **electricity market?**

4 A. Yes, Duquesne Light's default service plans have facilitated and supported the competitive
5 retail market over a sustained period. For years, Duquesne Light has consistently been
6 among the top utilities in the United States in terms of percentage of total load switched to
7 a competitive supplier. It remains among the top twenty utilities in the United States in
8 terms of percentage of total load switched. As of March 2020, 67% of the load in Duquesne
9 Light's service area is receiving supply from an EGS. These results have been achieved
10 without imposing undue price volatility on default service customers or without the use of
11 opt-out customer assignment programs. The foundation for these results has been the
12 tailored supply portfolios that take into account benefits of price stability, as well as other
13 initiatives that Duquesne Light has implemented to promote competition while balancing
14 the interests of its customers and shareholders.¹⁸

15
16 **III. DSP IX Satisfies the Requirements of Act 129 by Incorporating a Prudent Mix of**
17 **Contracts Designed to Ensure Least Cost to Customers Over Time, Taking into**

¹⁸ For example, Duquesne Light's management proposed a market determination of stranded costs through the voluntary divestiture of its generation assets. This provided enormous benefits to customers in the form of accelerated recovery of stranded costs, significant rate reductions, and a faster transition from capped default service rates to default service rates that are better designed to reflect market price levels, against which EGSs may compete. Duquesne Light was the first utility in Pennsylvania to develop an hourly pricing program for large commercial and industrial customers. In DSP IV, Duquesne Light negotiated with EGSs, customer groups, and other parties one of the first Pennsylvania purchase of receivables ("POR") pilot programs, whereby Duquesne Light offered to purchase the receivables of EGSs serving Residential and Small C&I customers. In DSP V, Duquesne Light expanded the POR program to include Medium C&I customers.

1 **Account the Benefits of Price Stability, and by Including Prudent Steps Necessary to**
2 **Obtain Least Cost Generation Supply**

3 **Q. Please summarize Duquesne Light's proposed plan for DSP IX.**

4 A. DSP IX will continue the basic procurement strategy that was established in DSP VIII,
5 which includes procurement of a prudent mix of products from competitive wholesale
6 suppliers and has supported retail market competition. The following chart provides a
7 summary of the DSP IX portfolio for each customer class:

Figure 5 Duquesne Light Tailors its Supply Portfolios by Customer Class

Residential & Lighting	Small C&I (< 25 kW)	Medium C&I < 200 kW (≥ 25 kW and < 200 kW)¹⁹	HPS-Eligible (≥ 200 kW)²⁰
<ul style="list-style-type: none"> • Six-month fixed default service supply rates • Continue procurement of 50% of supply from one-year and 50% of supply from two-year full requirements supply products with overlapping delivery periods²¹ • Products are procured every six months within three months of start of delivery 	<ul style="list-style-type: none"> • Six-month fixed default service supply rates • Continue procurement of 50% of supply from one-year and 50% of supply from two-year full requirements supply products with overlapping delivery periods²² • Products are procured every six months within three months of start of delivery 	<ul style="list-style-type: none"> • Three-month fixed default service supply rates • Continue procurement of 100% of supply from three-month full requirements supply products with delivery periods that do not overlap • Products are procured every three months within three months of start of delivery 	<ul style="list-style-type: none"> • Hourly price default service supply rates • Continue to procure supply through an auction every twelve months within three months of start of delivery • Winning suppliers are paid their fixed bid price plus their share of the associated (day-ahead hourly) energy, capacity, and ancillary service charges billed pursuant to Rider No. 9.
<ul style="list-style-type: none"> • Approximately 34% of total system load 	<ul style="list-style-type: none"> • Approximately 7% of total system load 	<ul style="list-style-type: none"> • Approximately 13% of total system load 	<ul style="list-style-type: none"> • Approximately 46% of total system load

¹⁹ Duquesne Light lowered the threshold for customers who are not offered default service rates based on day-ahead hourly market prices from < 300 kW to < 200 kW on June 1, 2019.

²⁰ Duquesne Light lowered the threshold for customers who are offered default service rates based on day-ahead hourly market prices from ≥ 300 kW to ≥ 200 kW on June 1, 2019.

²¹ As explained by Duquesne Light witness John Peoples in Duquesne Light Statement No. 2, Duquesne Light also has proposed that 12.5% of the Residential & Lighting default service supply that spans December 2021 through November 2022, and that is currently scheduled to be procured via DSP VIII procurements, instead be procured in the September 2021 DSP IX auction in the form of 12-month FPFR products.

²² As explained by Duquesne Light witness John Peoples in Duquesne Light Statement No. 2, Duquesne Light also has proposed that 12.5% of the Small C&I default service supply that spans December 2021 through November 2022, and that is currently scheduled to be procured via DSP VIII procurements, instead be procured in the September 2021 DSP IX auction in the form of 12-month FPFR products.

1 HPS-Eligible customers, which comprise approximately 46% of the total load in
2 Duquesne Light's service area, will be offered default service rates based on day-ahead
3 hourly market prices.

4 Medium C&I <200kW customers, which comprise approximately 13% of the total
5 load in Duquesne Light's service area, will be offered three-month fixed-price default
6 service rates that are based on quarterly procurements of three-month products that do not
7 overlap.

8 Small C&I customers, which comprise approximately 7% of the total load in
9 Duquesne Light's service area, will be offered default service supply rates that adjust every
10 six months, and these rates will be based on a combination of overlapping one-year
11 contracts and overlapping two-year contracts procured every six months.

12 Residential & Lighting customers, which represent about 34% of the total load in
13 Duquesne Light's service area, also will be offered default service supply rates that adjust
14 every six months, and these rates will be based on a combination of overlapping one-year
15 contracts and overlapping two-year contracts procured every six months.

16 In Duquesne Light Statement No. 2, Duquesne Light witness John Peoples
17 describes the procurement processes for the different customer classes in more detail. The
18 Company is also evaluating the benefits of entering into a long-term Power Purchase
19 Agreement ("PPA") to support a utility-scale solar project in Pennsylvania at some point
20 during the DSP IX supply period. The alternative energy credits associated with this
21 project would be used toward compliance with the requirements of the AEPS Act with
22 respect to default service load. In Duquesne Light Statement No. 1, Duquesne Light
23 witness C. James Davis discusses this proposal.

1

2 **Q. The January 2020 Secretarial Letter requests that EDCs include in their DSP filings**
3 **evidence showing how their DSP proposals comply with the prudent mix**
4 **requirements of the Public Utility Code and case law.²³ Does DSP IX satisfy Section**
5 **2807(e)(3.1) of the Act, which requires that supply be acquired through competitive**
6 **procurement processes?**

7 A. Yes, DSP IX satisfies this requirement. Section 2807(e)(3.1) provides that the default
8 service provider shall acquire electric power through competitive procurement processes
9 including one or more of the following: auctions, RFPs, and/or bilateral agreements entered
10 into at the sole discretion of the default service provider. DSP IX satisfies Section
11 2807(e)(3.1) by relying on open and competitive solicitation processes utilizing auctions
12 for full requirements supply contracts to obtain default service supply for all of its
13 customers.

14

15 **Q. Act 129 requires a default service plan to procure a prudent mix of contracts and to**
16 **include prudent steps necessary to obtain least cost generation supply contracts on a**
17 **long-term, short-term and spot market basis.²⁴ What guidance has the Commission**
18 **provided in interpreting that standard?**

19 A. On October 4, 2011, the Commission entered its Second Default Service Rulemaking
20 Order, and in this Order, it provided guidance based on input received from stakeholders.

²³ *January 2020 Secretarial Letter*, p. 11.

²⁴ 66 Pa. C.S. § 2807(e)(3.4), and 66 Pa. C.S. § 2807(e)(3.7).

1 Some of the Commission's guidance regarding the interpretation of "least cost" and
2 "prudent mix" is as follows:

3 [T]he ["least cost"] standard must give the DSP sufficient latitude to select
4 contracts that constitute a "prudent mix" which includes a sufficient
5 variety of products that adequately take into consideration price volatility,
6 changes in generation supply, customer usage characteristics and the need
7 to assure safe and reliable service.²⁵

8 In implementing default service standards, the Commission must be
9 concerned about rate stability as well as other considerations such as
10 ensuring a "prudent mix" of supply and ensuring safe and reliable service.
11 In our view, a default service plan that meets the "least cost over time"
12 standard should not have, as its singular focus, the achievement of the
13 absolute lowest cost over the default service plan time frame but rather a
14 cost for power that is both relatively stable and also economical relative to
15 other options.²⁶

16 Price stability benefits are very important to some customer groups, so an
17 interpretation of "least cost" that mandates subjecting all default service
18 customers to significant price volatility through general reliance on short
19 term pricing is inconsistent with Act 129's objectives.²⁷

20 We agree with the majority of parties that the "prudent mix" of contracts
21 be interpreted in a flexible fashion which allows the DSPs to design their
22 own combination of products that meets the various obligations to achieve
23 "least cost to customers over time," ensure price stability, and maintain
24 adequate and reliable service.²⁸

25 We do reject the positions of those parties that "prudent mix" be defined
26 to always require a specific mix or percentage of types of contract

²⁵ *Default Service and Retail Electric Markets*, Docket No. L-2009-2095604 (Order entered October 4, 2011) ("Second Default Service Rulemaking Order"), p. 38.

²⁶ *Second Default Service Rulemaking Order*, p. 40.

²⁷ *Second Default Service Rulemaking Order*, p. 41.

²⁸ *Second Default Service Rulemaking Order*, p. 60.

1 components in each default service plan or a minimum of two types of
2 products.²⁹

3
4 **Q. Do you believe that DSP IX incorporates a prudent mix of contracts, and includes**
5 **prudent steps necessary to obtain least cost generation supply contracts, as required**
6 **by Section 2807(e)(3.4) and Section 2807(e)(3.7) of Act 129?**

7 A. Yes, I do. There are several reasons for this conclusion:

8 1. The procurement process is designed to ensure the least cost to customers by
9 requiring qualified bidders in the supply product solicitations to compete and be
10 selected based on the lowest price. Furthermore, when FPCR products are solicited,
11 default service customers are provided the benefits of competition on all aspects of
12 the full requirements supply obligation, including the portfolio management
13 function.³⁰ It is reasonable to assume that bidders in the FPCR product solicitations
14 will consider the costs and risks associated with all forms of supply available to
15 them to satisfy their fixed-price full requirements obligation, and will reflect in their
16 bid prices the benefits of any opportunity that they believe is the least cost supply
17 opportunity.

18 2. DSP IX relies on FPCR default service supply products, which are well-tested in
19 the marketplace. These products have been successfully procured by Duquesne

²⁹ *Second Default Service Rulemaking Order*, p. 60.

³⁰ FPCR product suppliers have the responsibility for continuously satisfying the uncertain and constantly changing supply requirements at the agreed-upon price, and therefore must manage the associated costs and risks through their supply portfolio decisions.

1 Light and are frequently procured by utilities in Pennsylvania and in other
2 jurisdictions.³¹

3 3. The Commission has recognized the benefits of reliance on full requirements
4 products in a default service portfolio, as it stated in its Second Default Service
5 Rulemaking Order:

6 The [full requirements] process insulates default supply customers
7 from the volatility associated with wholesale market conditions
8 with the supplier bearing the risks of factors such as customer
9 migration, weather, load variation and economic activity.³²

10 We do express a preference for continued reliance by DSPs on the
11 [full requirements] approach to the extent this method best suits the
12 DSP's particular procurement needs.³³

13 The seller of a FPFR product is responsible for assuming, managing, and covering
14 the financial costs and risks associated with electricity supply, while customers are
15 protected against adverse market and/or generation cost outcomes. Sellers of FPFR
16 products must satisfy their obligation, regardless of how much market prices or
17 generation costs may increase during the delivery period and regardless of the
18 default service load level. Yet if market prices decrease after these types of supply
19 contracts are signed, customers may elect service from a lower cost competitive
20 retail supplier.

³¹ Examples of specific jurisdictions in which full requirements supply products are procured include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, Ohio, Pennsylvania, and Washington D.C.

³² *Second Default Service Rulemaking Order*, p. 54.

³³ *Second Default Service Rulemaking Order*, p. 56.

1 4. DSP IX continues the use of a standard supply contract (referred to as a supply
2 master agreement or “SMA”), which lets bidders know the terms and requirements
3 of the default service supply obligation well in advance of the bid due date, and
4 therefore allows qualified bidders to submit firm bid prices knowing that these
5 contract terms and conditions will not change. The use of a standard contract also
6 assures qualified bidders that the selection of the winning bidders will be an
7 objective process. Consequently, the use of a standard contract encourages
8 participation in the solicitations from many potential suppliers.

9 5. DSP IX is also prudent because it includes tailored supply portfolios for different
10 customer classes that take into account the benefits of price stability, the different
11 shopping propensity of each customer class, and the desire to support the
12 competitive retail market in Duquesne Light’s service area.

13
14 **Q. Has the Commission supported the use of a tailored supply portfolio for each**
15 **customer class?**

16 **A. Yes. Specifically, in its Second Default Service Rulemaking Order, in its discussion of**
17 **the “prudent mix” requirement under Act 129, the Commission stated:**

18 The Commission notes there was substantial unanimity on this point and
19 agrees with the parties that the “prudent mix” standard should be
20 interpreted to allow for a class-specific product mix that best matches the
21 needs of each DSP customer class.³⁴

³⁴ *Second Default Service Rulemaking Order*, p. 69.

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Q. Do you believe that DSP IX is designed to ensure adequate and reliable service, as required by Section 2807(e)(3.4) of the Act?

A. Yes. First, the supply contracts contain protections to provide reliability with respect to the sellers' ability to satisfy the terms and conditions of the contracts. Under DSP IX, suppliers must satisfy certain requirements (including being a member in good standing of PJM) that help ensure that they are able to perform their obligations.

In addition, since all of the load served under the contracts will be supplied through PJM, regardless of whether the winning default service supply bidders own or control generation, reliable and adequate service is further ensured. PJM is a FERC-approved regional transmission organization with a central responsibility to ensure the reliability of its regional electricity grid of which Duquesne Light is a part, and PJM has numerous mechanisms in place to meet this responsibility. Furthermore, if a default service supplier defaults on its contract, Duquesne Light can procure from PJM the physical supply necessary to ensure adequate and reliable service to satisfy its default service obligations.

Q. Mr. Fisher, does DSP IX include a reasonable degree of flexibility to accommodate the possibility of future changes in the default service supply approach?

A. Yes. DSP IX incorporates this flexibility in several ways. First, the default service supply product portfolios for the HPS-Eligible and Medium C&I <200kW procurement classes do not include any supply products with delivery periods that extend beyond May 31, 2025, the end of the DSP IX period. As a result, the Commission can easily adopt a similar plan

1 or a very different plan for the period starting June 1, 2025, without facing situations
2 involving pre-existing default service supply products for these customer classes with
3 deliveries that extend beyond the DSP IX period.

4 Second, the first solicitation for Residential & Lighting and Small C&I supply
5 products with delivery periods that extend beyond May 31, 2025 (the end of the DSP IX
6 period) does not occur until September 2023.³⁵ As a result, there is a significant amount of
7 time before commitments to new supply products extending beyond the DSP IX period are
8 made, should changes need to be made due to legislative or regulatory mandates. In the
9 meantime, these solicitations remain scheduled because they allow for the option for a
10 fairly seamless continuation of the laddered procurement cycle as Duquesne Light
11 transitions from DSP IX to DSP X,³⁶ and they avoid subjecting Residential & Lighting and
12 Small C&I customers to a “hard stop” with regard to their supply products at the end of the
13 DSP IX period. This helps to avoid the need to replace a large portion of default service
14 supply in a short period of time at the end of the DSP IX period. Customers could be
15 exposed to magnified risks and rate instability if a default service plan were to require that
16 a large portion of the customers’ default service supply be procured in a short period of
17 time.

18 Finally, DSP IX provides flexibility because it relies on full requirements supply
19 products. Full requirements products provide just enough supply to satisfy the actual load

³⁵ Furthermore, the supply product obtained in the September 2023 solicitation that extends beyond May 31, 2025 represents only 12.5% of the respective customer class’s default service load.

³⁶ In its *Second Default Service Rulemaking Order*, the Commission recognized the importance of “laddering” contracts in procuring default service supply. Specifically, the Commission stated, “We agree with those parties that utilizing such practices as laddering contracts, with varying procurement periods and contract durations over multiple procurements provide definite benefits in terms of minimizing the impacts of market volatility and decreasing customer risk.” (*Second Default Service Rulemaking Order*, pp. 62-63.)

1 obligations, thereby mitigating the risk of being saddled with commitments to purchase
2 supply that is not needed. This is especially valuable given ongoing uncertainty about
3 future customer migration.
4

5 **Q. Is DSP IX designed to support the competitive retail electricity market?**

6 A. Yes. EGSs will compete against market-based default service rates, as the default service
7 rates will be based on the prices for supply products obtained through competitive
8 solicitations in which multiple bidders compete to sell the products solely on the basis of
9 price. In addition, the use of FPFR supply products for the Residential & Lighting, Small
10 C&I, and Medium C&I <200kW classes will allow those classes' default service rates to
11 closely match the market-based supply costs, reducing the likelihood of significant over-
12 and under-collections from retail customers and enhancing rate transparency for retail
13 supply decisions.³⁷ Furthermore, the FPFR supply products and their procurement timing
14 under DSP IX will result in a relatively stable and transparent residential price-to-compare
15 benchmark against which residential customers can compare competing retail offers.
16 Finally, as discussed by Duquesne Light witness Davis in Duquesne Light Statement No.
17 1, Duquesne Light will continue its pre-established retail market initiatives, such as its
18 Standard Offer Program, through May 31, 2025.

³⁷ Over- and under-collections are related to the degree to which actual costs during a given period may vary from the retail rates that were set for that period. If there is significant uncertainty about the all-in dollar-per-megawatt-hour default service supply cost for an upcoming rate period when the default service retail supply rate for that period is set, then the likelihood of significant over- and under-collections is increased. FPFR products generally entail very little uncertainty about the default service supply costs on a dollars-per-megawatt-hour basis for any given upcoming rate period at the time that the default service retail rate for that period is set, effectively reducing the potential for significant over- or under-collections. It should be noted that over- and under-collections also can occur due to billing cycle lag.

1

2 **Q. Do you believe that FPFR suppliers' bid prices will be noticeably higher due to**
3 **Duquesne Light's proposal to include, in the FPFR products, the supply for customers**
4 **enrolled in Duquesne Light's proposed Electric Vehicle Time-of-Use ("EV-TOU")**
5 **Pilot Program?**³⁸

6 A. No. Both the fixed-rate default service and the EV-TOU Pilot Program will be supplied
7 via the same FPFR products, so customer switching between the fixed-rate default service
8 and the EV-TOU Pilot Program will not cause load uncertainty issues which the suppliers
9 otherwise may be expected to price into their bids.³⁹ Furthermore, since suppliers will be
10 paid the same price for a megawatt-hour of supply regardless of what proportion of the
11 supply is for EV-TOU Pilot Program customers, suppliers will not bear any revenue risk
12 associated with whether a given megawatt-hour of supply is needed by a customer on the
13 fixed-rate default service or a customer enrolled in the EV-TOU Pilot Program. In
14 addition, to the extent that customers elect the EV-TOU Pilot Program and shift their usage
15 to lower-priced periods or reduce their usage during higher-priced periods, the underlying
16 market-based cost to supply the customers could be reduced, resulting in lower FPFR
17 supplier bid prices over time. Finally, I expect the number of customers who elect the EV-
18 TOU Pilot Program in the near term to be relatively small relative to the overall customer
19 base. If the EV-TOU Pilot Program is expected to represent a small percentage of a given

³⁸ Duquesne Light witness Katherine M. Scholl in Duquesne Light Statement No. 5 describes the EV-TOU Pilot Program and the customer enrollment process. In Duquesne Light Statement No. 4, Duquesne Light witness David B. Ogden describes the supply rates for the EV-TOU Pilot Program.

³⁹ In contrast, if the supply for the EV-TOU Pilot Program were solicited separately, default service suppliers would bear additional risks related to customer switching to and from the EV-TOU Pilot Program. Duquesne Light's proposal eliminates these risks and is relatively easy to administer.

1 FPCR product's supply, then any effects of the EV-TOU Pilot Program on the FPCR
2 product supplier's bid price should be small.

3

4 **Q. Does this conclude your direct testimony?**

5 **A. Yes, it does.**

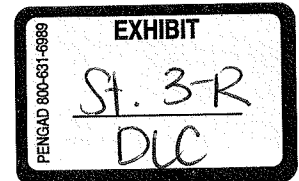
DUQUESNE LIGHT STATEMENT NO. 3-R

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition Of Duquesne Light Company :
For Approval Of Default Service Plan :
For The Period June 1, 2021 Through :
May 31, 2025 :**

Docket No. P-2020-3019522

**REBUTTAL TESTIMONY OF
SCOTT G. FISHER**



Dated: August 14, 2020

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1 **I. Introduction**

2 **Q. Please state your full name, professional position, and business address.**

3 A. My name is Scott G. Fisher. I am a Partner at The NorthBridge Group, which is an
4 economic and strategic consulting firm serving the electric and natural gas industries. My
5 business address is 30 Monument Square, Suite 105, Concord, Massachusetts, 01742.

6

7 **Q. Have you previously submitted testimony in this proceeding?**

8 A. Yes, I submitted direct testimony that is marked as Duquesne Light Statement No. 3. My
9 background and qualifications are set forth in that statement.

10

11 **Q. What is the purpose of your rebuttal testimony?**

12 A. The main purposes of my testimony are as follows:

13 1. I provide a brief contextual overview of various intervenor testimony regarding the
14 default service supply product mix in Duquesne Light's proposed default service
15 plan (the "Default Service Plan" or "Plan" or "DSP IX") to procure supply for
16 default service customers for the period beginning June 1, 2021, and ending May
17 31, 2025.

18 2. I respond to arguments offered by MAREC Action ("MAREC") witness Elizabeth
19 Stanton pertaining to her recommendation to increase the quantity of supply to be

1 purchased in the form of long-term default service supply contracts for renewable
2 generation.¹

3 3. I address Christopher H. Kallaher’s recommendation, on behalf of a coalition of
4 electric generation suppliers (“EGSs”) that includes Direct Energy Services,
5 Interstate Gas Supply, Inc., Shipley Choice LLC, NRG Energy, Inc, Vistra Energy
6 Corp., ENGIE Resources LLC., and WGL Energy Services, Inc. (“EGS Parties”),
7 that Duquesne Light revise the Standard Offer Program (“SOP”) to require new or
8 moving customers calling to initiate service to choose only an EGS service option
9 rather than default service.²

10 4. I address Harry Geller’s recommendation, on behalf of the Coalition for Affordable
11 Utility Services and Energy Efficiency in Pennsylvania (“CAUSE-PA”), that
12 Duquesne Light amend its SOP to return customers to default service if they do not
13 make an affirmative decision to stay with their current EGS or select a new EGS at
14 the end of the 12-month SOP contract.³

15
16 **Q. Please summarize your conclusions.**

17 A. My main conclusion is that neither Dr. Stanton nor Mr. Kallaher provides any arguments
18 that invalidate the fact that Duquesne Light’s proposed Default Service Plan includes a

¹ Direct Testimony of Elizabeth Stanton, pp. 32-33.

² EGS Parties’ Statement No. 1, pp. 4, 15.

³ CAUSE-PA Statement No. 1, p. 30.

1 “prudent mix” of contracts designed to ensure the least cost to customers over time.⁴ In
2 particular:

- 3 1. Duquesne Light’s DSP IX strikes a reasonable balance of competing perspectives
4 regarding the default service supply product mix.
- 5 2. MAREC’s recommendation, to increase the quantity of supply to be purchased in
6 the form of long-term default service supply contracts for renewable generation, is
7 unsubstantiated, and the analysis presented to justify this recommendation is
8 fundamentally flawed. Specifically:
 - 9 a. Dr. Stanton has offered no compelling reason to increase the quantity of
10 supply to be purchased in the form of long-term default service supply
11 contracts beyond that proposed by Duquesne Light.
 - 12 b. Dr. Stanton’s analysis to support her recommendation is fundamentally
13 flawed and should not be relied upon.
 - 14 c. Dr. Stanton’s related recommendation, for the Pennsylvania Public Utility
15 Commission (“Commission”) to initiate a separate stakeholder effort to
16 redesign Duquesne Light’s default service product mix, is unnecessary, is
17 insufficiently defined, and would add costs and jeopardize the timely
18 implementation of a default service plan that complies with the
19 requirements of Pennsylvania’s Act 129 of 2008 (the “Act” or “Act 129”).
- 20 3. EGS Parties’ recommendation, that Duquesne Light revise the SOP to require new
21 or moving customers calling to initiate service to choose only an EGS service

⁴ 66 Pa. C.S. § 2807(e)(3.4).

1 option, raises legitimate public policy concerns with the potential for significant
2 customer harm and should be rejected.

- 3 4. Implementation of CAUSE-PA's recommendation to return SOP customers to
4 default service at the end of the 12-month SOP term, if they do not otherwise make
5 an affirmative decision, would conflict with the Commission's standard SOP
6 guidance.

7 Each of these conclusions is described in more detail below.

8
9 **Q. Are you sponsoring any Exhibits as part of your rebuttal testimony?**

10 **A.** Yes. I am sponsoring the following exhibits:

- 11 • Exhibit SGF-1R Other Parties' Responses to Discovery Questions
12 • Exhibit SGF-2R Correction in MAREC Actions' Calculation of Rate of Decrease in
13 Reported Wind Capital Costs to Be Expressed in Nominal Dollars
14 • Exhibit SGF-3R Calculation of Total Residential EGS Charges over Default Service
15 in Percentage Terms (Based on CAUSE-PA Exhibit 1)

16
17 **II. Duquesne Light's DSP IX Strikes a Reasonable Balance of Competing Perspectives**
18 **Regarding the Default Service Supply Product Mix**

19 **Q. Which intervenors have voiced concerns about Duquesne Light's proposed default**
20 **service supply product mix?**

1 A. Only two intervenors, MAREC and EGS Parties, voice concerns about Duquesne Light's
2 proposed default service supply product mix. Both intervenors' concerns relate to the
3 quantity of supply to be purchased in the form of long-term contracts.⁵

4

5 **Q. How do the positions of these two parties relate to each other?**

6 A. These two parties offer very different perspectives, and their recommendations represent
7 opposite ends of the spectrum with respect to the quantity of supply to be purchased in the
8 form of long-term contracts in the default service supply portfolio. MAREC witness
9 Stanton recommends that Duquesne Light incorporate a larger quantity of long-term
10 contracts in its default service supply mix.⁶ In stark contrast, EGS Parties witness Kallaher
11 recommends that the Commission provisionally eliminate Duquesne Light's proposed
12 long-term solar contract as part of its default service supply mix.⁷

13

14 **Q. Do any other parties in this proceeding oppose Duquesne Light's proposed default**
15 **service supply product mix?**

16 A. No other intervenor has expressed any opposition to Duquesne Light's proposed default
17 service supply product mix. Furthermore, the Office of Consumer Advocate ("OCA") has
18 actively voiced its satisfaction with Duquesne Light's residential default service supply

⁵ MAREC witness Stanton also makes the following related recommendation: "For optimal results for ratepayers, the Commission should direct the Company to work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables." (Direct Testimony of Elizabeth Stanton, pp. 32-33.)

⁶ Direct Testimony of Elizabeth Stanton, pp. 32-33.

⁷ EGS Parties' Statement No. 1, p. 4.

1 portfolio and its reasoning for its choice of proposed supply product mix,⁸ noting that “the
2 products that DLC is proposing to use to meet its residential default service obligations
3 provide a reasonable balance between price stability and market responsiveness and are
4 consistent with Act 129.”⁹

5
6 **Q. At a high level, what do these facts indicate about Duquesne Light’s proposed default
7 service supply mix?**

8 A. I will address in detail the specific positions of the intervenors later in my testimony. But
9 at a high level, the fact that no intervenor has voiced any concerns with regard to the default
10 service supply product mix, except two intervenors that have diametrically opposed
11 positions on one issue, indicates that Duquesne Light’s DSP IX strikes a reasonable balance
12 of competing perspectives regarding the default service supply mix. Duquesne Light’s
13 carefully designed approach incorporates stakeholder input through evidentiary
14 proceedings as well as past Commission approvals of both Duquesne Light’s tailored
15 supply portfolios for different customer classes¹⁰ and the results of default service supply
16 solicitations. It provides the benefits of competition on all aspects of the full requirements
17 supply obligation (including the portfolio management function) through the procurement

⁸ OCA Statement No. 1, p. 3.

⁹ OCA Statement No. 1, p. 7.

¹⁰ Duquesne Light Statement No. 3, p. 25.

1 of fixed-price full requirements (“FPFR”) products,¹¹ and it incorporates design
2 components to support the competitive retail electricity market.¹²

3
4 **III. MAREC’s Recommendation, to Increase the Quantity of Supply to Be Purchased in**
5 **The Form of Long-Term Default Service Supply Contracts for Renewable**
6 **Generation, Is Unsubstantiated, and the Analysis Presented to Justify this**
7 **Recommendation Is Fundamentally Flawed.**

8 **A. Dr. Stanton Has Offered No Compelling Reason to Increase the Quantity of**
9 **Supply to Be Purchased in the Form of Long-Term Default Service Supply**
10 **Contracts Beyond that Proposed by Duquesne Light**

11 **Q. What is MAREC witness Stanton’s main recommendation?**

12 **A. In her direct testimony, Dr. Stanton states, “I recommend that the Commission require**
13 **Duquesne to do issue [sic] a bundled renewables RFP.”¹³**

14
15 **Q. Does Duquesne Light’s Plan already include a solicitation for bundled renewable**
16 **generation?**

17 **A. Yes, Duquesne Light is already proposing as part of its Plan to conduct a solicitation for**
18 **bundled renewable generation.¹⁴ Specifically, as explained by Duquesne Light witness C.**
19 **James Davis in Duquesne Light Statement No. 1, Duquesne Light is proposing to conduct**
20 **a competitive solicitation for a long-term contract to support a utility-scale solar generation**

¹¹ Duquesne Light Statement No. 3, p. 23.

¹² Duquesne Light Statement No. 3, p. 28.

¹³ Direct Testimony of Elizabeth Stanton, p. 32.

¹⁴ Duquesne Light Statement No. 1, pp. 10, 13-17.

1 project of up to 7 MW in capacity.¹⁵ The contract would include the purchase of both energy
2 and alternative energy credits (“AECs”) from the solar generating facility.¹⁶ The AECs are
3 required for compliance with Pennsylvania's Alternative Energy Portfolio Standards
4 (“AEPS”) Act. In the discovery process, Dr. Stanton explained, “In the Pennsylvania
5 context, a bundled renewables RFP refers to an RFP that accepts [sic] offers that include
6 both AECs and energy.”¹⁷ This is the bundle of products for which Duquesne Light is
7 proposing to conduct a solicitation. As such, Dr. Stanton’s main recommendation, that
8 Duquesne Light “issue a bundled renewables RFP,” is already a part of Duquesne Light’s
9 Plan.

10
11 **Q. If Duquesne Light’s Plan already incorporates Dr. Stanton’s recommendation to**
12 **conduct a solicitation for bundled renewable generation, then how does Dr. Stanton’s**
13 **recommendation differ from Duquesne Light’s proposal?**

14 A. Duquesne Light asked this question as part of the discovery process, and Dr. Stanton
15 answered, “Dr. Stanton’s recommendation suggests a larger number of AECs and
16 MWhs.”¹⁸ Dr. Stanton recommends that Duquesne Light increase the quantity of supply to
17 be purchased in the form of long-term default service supply contracts for renewable
18 generation.

¹⁵ Duquesne Light Statement No. 1, pp. 10, 13-17.

¹⁶ Duquesne Light Statement No. 1, p. 17.

¹⁷ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-20a. (Exhibit SGF-1R)

¹⁸ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-20g. (Exhibit SGF-1R)

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Q. Does Dr. Stanton specify by how much she recommends increasing the quantity of supply to be purchased in the form of long-term default service supply contracts for renewable generation?

A. No. This is not specified in her discovery responses or her testimony. However, Dr. Stanton offers a second recommendation that is positioned as a contingent recommendation if her main recommendation is not implemented. Her contingent recommendation is underlined below:

I recommend that the Commission require Duquesne to do issue [sic] a bundled renewables RFP. In the absence of such an RFP, the Commission should require Duquesne to initiate a pilot program amounting to 10 percent or more of its total AECs obligation (or a minimum of 21 MW solar or 12 MW wind renewables contracts).¹⁹

Specifically, she recommends that in the absence of a bundled renewables RFP, the Company should contract for the output from solar generation facilities totaling at least 21 MW, or from wind generation facilities totaling at least 12 MW.²⁰ This would constitute an increase in the quantity of supply to be purchased in the form of long-term contracts for renewable generation, as compared to Duquesne Light's proposal to contract for the output of a solar generation facility of up to 7 MW.

¹⁹ Direct Testimony of Elizabeth Stanton, p. 32. (Emphasis added.)

²⁰ Direct Testimony of Elizabeth Stanton, p. 32.

1 **Q. What is Dr. Stanton’s rationale for her specific recommendation that the output from**
2 **solar generation facilities totaling at least 21 MW, or from wind generation facilities**
3 **totaling at least 12 MW, be contracted by Duquesne Light?²¹**

4 A. As part of the discovery process, Dr. Stanton explained that her recommendation “was
5 offered only as a small number greater than zero, suggesting that Duquesne can at the very
6 least try out a long-term renewable contract approach in a pilot (initial and exploratory)
7 program.”²²

8

9 **Q. Would implementation of Duquesne Light’s proposal, to conduct a competitive**
10 **solicitation for a long-term contract to support a utility-scale solar generating facility**
11 **of up to 7 MW in capacity,²³ allow Duquesne Light to try out a long-term renewable**
12 **contract approach?**

13 A. Yes. On that basis, there is no reason to increase the quantity of supply to be purchased in
14 the form of long-term default service supply contracts for renewable generation, as Dr.
15 Stanton recommends.

16

²¹ Direct Testimony of Elizabeth Stanton, p. 32.

²² MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-22b. (Exhibit SGF-1R) This specific quote refers to the 10% value that is directly used to calculate Dr. Stanton's 21 MW and 12 MW values.

²³ Duquesne Light Statement No. 1, pp. 10, 13-17.

1 **Q. Are there any errors in Dr. Stanton’s numeric assumptions underlying her specific**
2 **call for at least 21 MW of solar generation or 12 MW of wind generation to be**
3 **procured through dedicated long-term contract solicitations?**

4 A. Yes. Dr. Stanton bases her recommendation on her understanding that Duquesne Light is
5 responsible for providing the required percentages of AECs on approximately 7,342 GWh
6 of annual load, a 2019 value that she calculated from a Duquesne Light exhibit pertaining
7 to its proposed EV-TOU Pilot Program.²⁴ However, Dr. Stanton has not interpreted this
8 7,342 GWh value correctly. The 7,342 GWh value that Dr. Stanton calculated includes all
9 delivered load, and not just the default service load on which Duquesne Light is responsible
10 for the required percentages of AECs. Second, the 7,342 GWh value does not include the
11 default service customers being served under Rider No. 9 – Day-Ahead HPS. Correcting
12 for these two errors, the applicable 2019 load value is 4,391 GWh.²⁵ Accordingly, if Dr.
13 Stanton’s calculations are corrected for these errors, her recommended MW figures are
14 reduced by approximately 40 percent. Specifically, her call for 21 MW of solar generation
15 or 12 MW of wind generation would change to 13 MW of solar generation or 7 MW of
16 wind generation, respectively, which is much closer to the up to 7 MW of solar generation
17 that the Company has proposed for default service supply.

18

²⁴ Direct Testimony of Elizabeth Stanton, p. 6.

²⁵ This is a 2019 value. In a given future year, the actual amount of load on which Duquesne Light is responsible for providing the required percentages of AECs could be significantly higher or lower than 4,391 GWh.

1 **Q. Do you have concerns about increasing the quantity of supply to be purchased in the**
2 **form of long-term default service contracts for renewable generation, as Dr. Stanton**
3 **suggests?**

4 A. Yes. The longer the term of a fixed-price, non-load-following default service supply
5 product, the more likely it is that prices and loads will deviate substantially from
6 expectations at the time that the product was procured. Consequently, the expanded use of
7 long-term contracts for default service supply, whether by increasing the annual contract
8 quantities or extending the contract delivery periods, can increase risks for customers. For
9 example, suppose Duquesne Light were to procure additional quantities of long-term
10 contracts for fixed quantities of supply, or for quantities of supply that are based on the
11 output of a given power generation resource, at fixed prices. If market prices then decline
12 and customers exercise their option to switch to EGS service, customers would find that an
13 unexpectedly high portion of their default service supply portfolio is composed of above-
14 market contracts, and these customers would need to pay for the above-market costs
15 through higher default service rates.²⁶ This would further encourage customers to switch
16 to EGS service, leaving the above-market costs of the long-term contracts to be incurred
17 by an even smaller default service customer base, thereby further driving up the default
18 service rates.

19 This type of risk is further compounded to the extent that the additional long-term
20 contracts are tied to the output of a specific renewable generating facility and the trend
21 cited by Dr. Stanton of decreasing capital costs for renewable generation resources

²⁶ It is even possible that the long-term contracts would result in supply that the default service customers ultimately do not even need, yet that excess supply would need to be sold at a loss at the expense of default service customers.

1 continues.²⁷ In this case, locking into a long-term contract with a specific renewable
2 generating facility in the near-term would forgo the benefits to customers of future cost
3 decreases in renewable generation.

4 Furthermore, as I will explain later in my testimony, the study that Dr. Stanton
5 presents to justify increasing the quantity of supply to be purchased in the form of long-
6 term default service contracts for renewable generation indicates that entering into twenty-
7 year contracts for renewable generation supply would save customers money, but entering
8 into ten-year contracts for renewable generation supply generally would not save customers
9 money.²⁸ Accordingly, if the results of the study are to be believed,²⁹ under expected
10 conditions any notable customer savings that Dr. Stanton alleges would be realized only if
11 the long-term contracts have especially long delivery periods. Yet, this would require the
12 Commission to make bets now, using Pittsburgh area residents' money, on what electricity
13 market prices will be well into the 2030s and possibly into the 2040s, with the cost of
14 misjudgments being borne by default service customers.

15
16 **Q. Given these concerns, do you oppose Duquesne Light's proposal to conduct a**
17 **competitive solicitation for a long-term contract to support a utility-scale solar**
18 **generating facility of up to 7 MW in capacity?**³⁰

²⁷ Direct Testimony of Elizabeth Stanton, p. 15.

²⁸ Direct Testimony of Elizabeth Stanton, p. 11. This reflects base case natural gas price projections. The referenced study indicates a very small savings associated with ten-year solar contracts, but a much larger loss associated with ten-year wind contracts. (*Pennsylvania Long-Term Renewables Contracts Benefits and Costs*, Stanton, E.A., et al., December 19, 2017, p. 6.)

²⁹ As I explain later, this study is fundamentally flawed and should not be relied upon.

³⁰ Duquesne Light Statement No. 1, pp. 10, 13-17.

1 A. No. Duquesne Light's Plan enables the opportunity to "try out a long-term renewable
2 contract approach," as Dr. Stanton would like,³¹ providing the opportunity to gain more
3 information about the solar generation market in Duquesne Light's service area, while
4 being sized to mitigate the risks that I have described above. Duquesne Light witness C.
5 James Davis elaborates further on the benefits of Duquesne Light's proposal in Duquesne
6 Light Statement No. 1 and Duquesne Light Statement No. 1-R.³²

7

8 **Q. Does Dr. Stanton offer any other reasons to increase the quantity of supply to be**
9 **purchased in the form of long-term default service contracts for renewable**
10 **generation?**

11 A. Dr. Stanton offers a few cursory claims about long-term renewable generation contracts in
12 general.³³ However, these claims do not justify increasing the quantity of supply to be
13 purchased in the form of long-term default service contracts for renewable generation in
14 Duquesne Light's Plan. For example, Dr. Stanton makes a claim about price stability
15 benefits from long-term renewable generation contracts.³⁴ Yet, I have already explained
16 that there are also risks associated with procuring larger quantities of supply in the form of
17 long-term renewable generation contracts. Furthermore, in my direct testimony I provide

³¹ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-22. (Exhibit SGF-1R)

³² Duquesne Light Statement No. 1, pp. 10, 13-17. Duquesne Light Statement No. 1-R, p. 3.

³³ Direct Testimony of Elizabeth Stanton, pp. 9-10.

³⁴ Direct Testimony of Elizabeth Stanton, p. 9.

1 extensive explanation and analysis that shows that Duquesne Light's proposed plan is
2 already designed to provide price stability benefits for customers.³⁵

3 Dr. Stanton also claims that AEC and/or energy market prices may at least
4 temporarily decrease if solicitations for long-term contracts increase the overall supply in
5 the market.³⁶ However, solicitations that are justified on the basis that they will at least
6 temporarily decrease market prices by injecting additional supply into the market can
7 discourage the development of, and/or accelerate the retirement of, clean energy generation
8 resources other than the resources supported by those solicitations, resulting in detrimental
9 long-term market and/or environmental effects.

10 Dr. Stanton also mentions the possibility of lower financing costs for renewable
11 generation development if the developer has a long-term contract available to it.³⁷
12 Duquesne Light witness Davis has already considered the possibility of this effect when
13 discussing Duquesne Light's proposal to conduct a competitive solicitation for a long-term
14 contract to support a utility-scale solar generating facility.³⁸

15

³⁵ Duquesne Light Statement No. 3, pp. 4-16, 27.

³⁶ "The addition of renewable generators leads to an increase in the availability of RECs. An increase in the supply of RECs helps to lower the price...The addition of renewable generation to the wholesale market supply curve displaces the most expensive generating units and lowers the wholesale market price of energy." (Direct Testimony of Elizabeth Stanton, p. 10.)

³⁷ Direct Testimony of Elizabeth Stanton, pp. 8-9, 10.

³⁸ Duquesne Light Statement No. 1, pp. 14-15.

1 **Q. Given all of these considerations, what do you conclude about Dr. Stanton's**
2 **recommendation to increase the quantity of supply to be purchased in the form of**
3 **long-term default service supply contracts for renewable generation?**

4 A. Dr. Stanton has offered no compelling reason to increase the quantity of supply to be
5 purchased in the form of long-term default service supply contracts beyond that proposed
6 by Duquesne Light.

7

8 **B. Dr. Stanton's Analysis to Support Her Recommendation Is Fundamentally**
9 **Flawed and Should Not Be Relied Upon**

10

11 **Q. Please describe the analysis that Dr. Stanton presents to support her recommendation**
12 **to increase the quantity of supply to be purchased in the form of long-term default**
13 **service supply contracts for renewable generation.**

14 A. Dr. Stanton presents the results of a 2017 study ("2017 Study"), which was intended to
15 show that engaging in long-term renewable (i.e., solar and wind) generation contracts
16 would save money for Pennsylvania retail customers.³⁹ Specifically, the 2017 Study
17 entailed comparing assumed prices for supply procured through long-term renewable
18 generation contracts over time with assumed future prices of supply procured through
19 Pennsylvania's established solicitations for default service supply products.⁴⁰ The
20 difference between these prices was determined to be the benefit of procuring supply

³⁹ Direct Testimony of Elizabeth Stanton, p. 11.

⁴⁰ Direct Testimony of Elizabeth Stanton, p. 10.

1 procured through long-term renewable generation contracts.⁴¹ Dr. Stanton was the lead
2 author of this study.

3
4 **Q. What are the main results of the 2017 Study relied upon by Dr. Stanton?**

5 A. Dr. Stanton presents the main results of the 2017 Study in Table 1 of her direct testimony.⁴²
6 The table indicates that, under her base case natural gas price projection, entering into
7 twenty-year contracts for renewable generation supply would save customers money, but
8 entering into ten-year contracts for renewable generation supply generally would not save
9 customers money.⁴³ Based on an examination of the 2017 Study, the ten-year contract result
10 is driven by a finding that ten-year contracts for wind generation would increase costs for
11 customers but ten-year contracts for solar generation would save customers only a
12 relatively small amount of money (\$3 million in net present value over ten years across all
13 of Pennsylvania).⁴⁴

14
15 **Q. Has Dr. Stanton updated her study since 2017?**

16 A. No, Dr. Stanton has not updated her study. As a proxy for determining whether she could
17 still rely on the basic conclusions of the 2017 Study, Dr. Stanton compared changes in the
18 prices of default service supply products procured through Pennsylvania utilities’

⁴¹ Direct Testimony of Elizabeth Stanton, p. 10.

⁴² Direct Testimony of Elizabeth Stanton, p. 11.

⁴³ Direct Testimony of Elizabeth Stanton, p. 11.

⁴⁴ *Pennsylvania Long-Term Renewables Contracts Benefits and Costs*, Stanton, E.A., et al., December 19, 2017, p. 6.

1 solicitations since around the time of the study with changes in reported capital costs for
2 solar and wind generation since around the time of the study. Based on Dr. Stanton's
3 analysis, average prices for default service supply products have fallen by roughly 6% per
4 year, while reported capital costs for wind and solar generation have fallen by roughly 6%
5 and 11-13% per year, respectively.⁴⁵ Since, according to Dr. Stanton's calculations, the
6 percentage decreases in the renewable generation capital costs are the same as, or even
7 greater than, the percentage decrease in the average price of the default service supply
8 products, Dr. Stanton concludes that her basic conclusions still hold regarding the
9 possibility of savings to customers of long-term renewable contracts.⁴⁶

10
11 **Q. Do you have concerns about the validity of Dr. Stanton's analysis?**

12 A. Yes, I have serious concerns about the validity of Dr. Stanton's analysis. Dr. Stanton's
13 analysis has fundamental flaws and tenuous assumptions that make her results unreliable,
14 and therefore her analysis should not be used to make any decision with respect to
15 Duquesne Light's long-term power purchases, as Dr. Stanton recommends.

16
17 **Q. Please elaborate on the fundamental flaws in Dr. Stanton's analysis that undermine**
18 **her conclusions.**

19 A. First of all, by simply comparing assumed prices for supply procured through long-term
20 renewable generation contracts over time with assumed future prices of supply procured

⁴⁵ Direct Testimony of Elizabeth Stanton, pp. 14-15.

⁴⁶ Direct Testimony of Elizabeth Stanton, p. 16.

1 through Pennsylvania's established solicitations for default service supply products, Dr.
2 Stanton has completely ignored the definitional differences between the output of
3 renewable generation resources and the default service supply that is provided in the
4 products obtained through Pennsylvania's established solicitations. In other words, Dr.
5 Stanton is comparing apples and oranges without recognizing the difference.

6 The overwhelming majority of the default service supply that is procured in
7 Pennsylvania is procured in the form of fixed-price full requirements ("FPFR") products,
8 or in the form of full requirements products that are predominately fixed-price. As I
9 describe in my direct testimony,⁴⁷ a FPFR default service supply product obligates the seller
10 of the product to satisfy a specified percentage of all of the default service customers'
11 supply requirements in every hour of the delivery period, regardless of the default service
12 customers' instantaneous changes in energy consumption, regardless of how frequently
13 customers switch to or from default service, and regardless of how the seller's cost to
14 satisfy its supply obligation may change. The seller is paid a predetermined price per
15 megawatt-hour for this service. The FPFR products that Duquesne Light procures include
16 the generation components required to supply Duquesne Light's default service customers,
17 including energy, capacity, and ancillary services, and AECs.

18 The output of renewable generation facilities is quite different. Unlike FPFR supply
19 products, which provide all of the energy needed on an instantaneous basis to cover the
20 actual default service load requirements of customers, solar and wind generating facilities
21 only generate electricity when the sun is shining or the wind is blowing. Insolation and

⁴⁷ Duquesne Light Statement No. 3, pp. 7-8.

1 wind patterns are significantly different from customers' electricity usage patterns, and
2 insolation and wind patterns are intermittent and uncertain. As a result, while FPCR supply
3 products can be relied upon to satisfy default service supply obligations, solar and wind
4 output must be supplemented with other products and services to satisfy default service
5 supply obligations. Furthermore, while FPCR supply products include the capacity credits
6 needed to satisfy the entire PJM capacity obligation associated with the default service
7 load, the capacity credits that solar and wind generation can provide are generally a fraction
8 of their nameplate capacity, to reflect the intermittent nature of the output from solar and
9 wind generation resources. In addition, the intermittent nature of solar and wind resources
10 can create a shortfall between the ancillary services that these resources are able to provide
11 and the ancillary services needs of the default service supply obligation. Moreover, as I
12 explain later, Dr. Stanton's estimated prices of the default service supply products obtained
13 through Pennsylvania's established solicitations include the cost of Network Integration
14 Transmission Service, which of course is not a service that renewable generation resources
15 provide.

16 Finally, unlike FPCR default service supply products, long-term fixed-price
17 contracts for the output from solar and wind generation resources do not hedge against
18 customers' financial risks associated with customer migration. If market prices decline
19 after these long-term renewable generation contracts are signed, and customers exercise
20 their option to switch to EGS service, the remaining smaller number of default service
21 customers would find that an unexpectedly high portion of their default service supply
22 portfolio is composed of above-market contracts, and these customers would need to pay
23 for the above-market costs through higher default service rates. In contrast, with FPCR

1 default service supply products, the quantity of supply under contract is tied to the default
2 service load, regardless of how many customers switch onto or off of default service, so
3 customers are not exposed to this risk.

4 When performing her analysis, Dr. Stanton overlooked these definitional
5 differences, and instead she assumed that one megawatt-hour of supply from default
6 service supply products that are obtained through Pennsylvania's established solicitations
7 is the same as one megawatt-hour of output from a renewable generation facility, and she
8 simply compared her assumed prices of each type of supply to calculate her results to
9 support her recommendations. She ignored costs and risks required to provide full
10 requirements service to default service customers. On this basis alone, the results of Dr.
11 Stanton's analysis should not be relied upon.

12
13 **Q. Does Dr. Stanton's analysis include any other significant flaws that undermine her**
14 **conclusions?**

15 A. Yes, it does. Dr. Stanton's 2017 Study includes tenuous and flawed assumptions regarding
16 the pricing of the supply products obtained through Pennsylvania's established default
17 service solicitations. To estimate prices for the default service products, Dr. Stanton simply
18 added \$25 per megawatt-hour to her estimated future locational marginal prices for
19 energy.⁴⁸ Her \$25 per megawatt-hour adder is comprised of two parts. The first part is \$20
20 per megawatt-hour, which the 2017 Study justifies as follows:

⁴⁸ *Pennsylvania Long-Term Renewables Contracts Benefits and Costs*, Stanton, E.A., et al., December 19, 2017, p. 17.

1 Per Pennsylvania’s bidding rules for default service procurement auctions,
2 a portion of the prices paid to winning suppliers in the fixed-price auction
3 consists of the real time hourly locational marginal price plus an adder of
4 \$20/MWh, which “is designed to capture an estimate of costs of other
5 supply components associated with meeting the full-requirements
6 obligation, including capacity, ancillary services, NITS, AEPS
7 compliance, and other costs.”⁴⁹

8 The 2017 Study’s characterization of a \$20 per megawatt-hour adder as being in
9 accordance with “Pennsylvania’s bidding rules for default service procurement auctions”
10 requires some context, as this \$20 per megawatt-hour adder is not a part of any bidding
11 rules for Duquesne Light’s default service supply products. This \$20 per megawatt-hour
12 adder applies only to some default service supply products solicited by the FirstEnergy
13 utilities and, where it is applicable, it is applied only to a small fraction of the supply
14 provided by the product. Specifically, some individual FirstEnergy full requirements
15 default service supply products are priced such that 95% of the of the supply provided by
16 the product is based on the winning bid price for that product and the other 5% of the supply
17 provided by the same product is priced at the real-time locational marginal price for energy
18 plus an administrative adder of \$20 per megawatt-hour.⁵⁰ The FirstEnergy bidding rules
19 state, “This adder is designed to capture an estimate of costs of other supply components
20 associated with meeting the full-requirements obligation, including capacity, ancillary
21 services, NITS, AEPS compliance, and other costs.”⁵¹ To the extent that the \$20 per

⁴⁹ *Pennsylvania Long-Term Renewables Contracts Benefits and Costs*, Stanton, E.A., et al., December 19, 2017, p. 16.

⁵⁰ Bidding Rules for Fixed-Price and Hourly-Priced Auctions to Procure Default Service Products under Default Service Program DSP-V for Metropolitan Edison Company (“Met-Ed”) Pennsylvania Electric Company (“Penelec”) Pennsylvania Power Company (“Penn Power”) West Penn Power Company (“West Penn”), CRA International, p. 4.

⁵¹ Bidding Rules for Fixed-Price and Hourly-Priced Auctions to Procure Default Service Products under Default Service Program DSP-V for Metropolitan Edison Company (“Met-Ed”) Pennsylvania Electric Company

1 megawatt-hour adder represents an estimate of the costs of other supply components, it is
2 only for the purpose of providing a placeholder compensation level for winning bidders for
3 the 5% of supply to which the adder is applied. Bidders in these FirstEnergy solicitations
4 may modulate their bid prices, which determine their compensation for the other 95% of
5 the supply, if they believe that the \$20 per megawatt-hour adder is too low or too high. The
6 \$20 per megawatt-hour estimate has only been vetted for this placeholder purpose, and
7 only in FirstEnergy's service area for a small portion of the default service supply. Given
8 this context, it would not be prudent to blindly rely on the \$20 per megawatt-hour value to
9 forecast default service supply product prices across Pennsylvania over the next twenty
10 years for the purpose of making any decisions with respect to Duquesne Light's long-term
11 power purchases.

12 Furthermore, the \$20 per megawatt-hour adder that the 2017 Study includes to
13 estimate the future prices of default service supply products obtained through
14 Pennsylvania's established solicitations explicitly includes an estimated cost of Network
15 Integration Transmission Service, or "NITS."⁵² NITS refers to costs that the PJM
16 Interconnection charges load serving entities for use of the transmission system. Winning
17 bidders in FirstEnergy's default service supply solicitations must cover the cost of NITS in
18 their bids, but this is not the case for winning bidders in Duquesne Light's default service
19 solicitations. Renewable generation resources obviously do not provide NITS, so Dr.

("Penelec") Pennsylvania Power Company ("Penn Power") West Penn Power Company ("West Penn"), CRA International, p. 4.

⁵² Bidding Rules for Fixed-Price and Hourly-Priced Auctions to Procure Default Service Products under Default Service Program DSP-V for Metropolitan Edison Company ("Met-Ed") Pennsylvania Electric Company ("Penelec") Pennsylvania Power Company ("Penn Power") West Penn Power Company ("West Penn"), CRA International, p. 4.

1 Stanton's analysis is flawed in its approach to estimate the benefits of entering into long-
2 term renewable generation contracts by performing a straight comparison of estimated
3 prices of default service supply products that include coverage of NITS costs with
4 estimated prices of long-term renewable generation contracts, without netting the cost of
5 NITS from its estimated default service supply product prices.

6
7 **Q. Are there any miscalculations in Dr. Stanton's assessment of cost trends since the**
8 **2017 Study, which also undermine her conclusions?**

9 A. Yes. As I noted previously, Dr. Stanton did not update her study from when it was issued
10 in 2017. Instead, as a proxy for determining whether she could still rely on the basic results
11 of the 2017 Study, Dr. Stanton compared changes in the prices of default service supply
12 products procured through Pennsylvania utilities' solicitations since around the time of the
13 study with changes in reported capital costs for solar and wind generation since around the
14 time of the study. Dr. Stanton calculated a rate of decrease of 6% per year in the average
15 prices of Pennsylvania's default service supply products, and the same 6% per year rate of
16 decrease in the reported capital costs for wind generation.⁵³ Dr. Stanton suggests that, since
17 her calculated rate of decrease in default service supply prices has not outpaced her
18 calculated rate of decrease in reported wind generation capital costs, the Commission can
19 still rely on the study's results to require Duquesne Light to engage in long-term wind
20 generation contracts to supply default service customers.⁵⁴

⁵³ Direct Testimony of Elizabeth Stanton, pp. 14-15.

⁵⁴ Direct Testimony of Elizabeth Stanton, p. 16.

1 However, Dr. Stanton's comparison of these rates of decrease is erroneous, which
2 adds to the flaws that undermine her overall analysis and conclusions. Specifically, Dr.
3 Stanton has confused nominal and real dollars. Dr. Stanton's calculation of the rate of
4 decrease in default service prices is on a nominal dollar basis, while her calculation of the
5 rate of decrease in reported wind generation capital costs is on a real dollar basis. Since
6 growth rates calculated on a nominal dollar basis include the rate of inflation while growth
7 rates calculated on a real dollar basis do not, Dr. Stanton is once again comparing apples
8 and oranges without recognizing it.

9 When the rate of decrease in reported wind generation capital costs is calculated on
10 a nominal dollar basis to provide for a more apples-to-apples comparison with the
11 calculated rate of decrease in default service prices, the calculated rate of decrease in
12 reported wind generation capital costs is 4% per year.⁵⁵ This rate of decrease in reported
13 wind generation capital costs is smaller than the calculated 6% annual rate of decrease in
14 the average prices of Pennsylvania's default service supply products. As a result, even if
15 all of the other flaws in the 2017 Study were hypothetically ignored, the 2017 Study is
16 likely to portray a more favorable picture of the economics of Pennsylvania wind
17 generation relative to market prices, than actually exists today.

18
19 **Q. Was Dr. Stanton able to provide the calculations behind her analysis, for you to**
20 **evaluate whether her analysis contains additional flaws?**

⁵⁵ Exhibit SGF-2R.

1 A. No. In the discovery process, Duquesne Light specifically requested the workpapers,
2 electronic files (with formulas intact), assumptions (with sources cited), and calculations
3 that were utilized to calculate the values shown in Table 1, Table 2, and Figure 1 of Dr.
4 Stanton's direct testimony, which constitute the results of the 2017 Study upon which Dr.
5 Stanton relies to justify her recommendation. In response, Dr. Stanton simply referred
6 Duquesne Light, without providing any further guidance, to the 2017 Study itself, a 21-
7 page document that does not contain the requested calculations.⁵⁶ Furthermore, Duquesne
8 Light also asked specific questions about the results shown in Table 1 and Figure 1 of Dr.
9 Stanton's direct testimony, and Dr. Stanton once again simply referred Duquesne Light to
10 the 2017 Study,⁵⁷ where answers to these specific questions do not exist.

11 Dr. Stanton was the lead author of the 2017 Study upon which she relies to justify
12 her recommendation. As a result, her reluctance or inability to provide any of the
13 calculations that she used to derive the results of the 2017 Study, or to answer questions
14 about the study, is yet another reason not to rely on the results of the study.

15
16 **Q. How do you respond to the "evidence from other jurisdictions" that Dr. Stanton**
17 **presents to support "the use of long-term contracts for the acquisition of renewable**
18 **resources to meet RPS requirements"?**⁵⁸

⁵⁶ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-12, I-15, I-16. (Exhibit SGF-IR)

⁵⁷ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-14, I-18. (Exhibit SGF-IR)

⁵⁸ Direct Testimony of Elizabeth Stanton, pp. 21-32.

1 A. As part of its Plan, Duquesne Light is proposing to enter into a long-term contract to
2 support a utility-scale solar project, and to use the AECs associated with this project to help
3 satisfy the requirements for compliance with Pennsylvania's AEPS Act.⁵⁹ Consequently, I
4 do not believe that Dr. Stanton's examples justify doing something different from what
5 Duquesne Light is proposing.

6

7 **Q. Given all of these considerations, what do you conclude about Dr. Stanton's analysis**
8 **to support her recommendation to increase the quantity of supply to be purchased in**
9 **the form of long-term default service supply contracts for renewable generation?**

10 A. Dr. Stanton's analysis to support her recommendation is fundamentally flawed and should
11 not be relied upon.

12

13 **C. Dr. Stanton's Related Recommendation, for the Commission to Initiate a**
14 **Separate Stakeholder Effort to Redesign Duquesne Light's Default Service**
15 **Product Mix, Is Unnecessary, Is Insufficiently Defined, and Would Add Costs**
16 **and Jeopardize the Timely Implementation of a Default Service Plan that**
17 **Complies with the Requirements of Act 129**

18

19 **Q. Does Dr. Stanton present any other recommendations in her direct testimony?**

20 A. Yes, Dr. Stanton states, "For optimal results for ratepayers, the Commission should direct
21 the Company to work together with stakeholders to design a prudent mix that allows
22 customers to receive the benefits of long-term contracts for renewables."⁶⁰

⁵⁹ Duquesne Light Statement No. 1, p. 10.

⁶⁰ Direct Testimony of Elizabeth Stanton, pp. 32-33.

1

2 **Q. Does Dr. Stanton provide any detail regarding her recommended stakeholder**
3 **process?**

4 A. No. Dr. Stanton's recommended stakeholder process is insufficiently defined. When asked
5 about her recommended stakeholder process during the discovery process, Dr. Stanton
6 could not provide any detail about the design of the process, nor did she have an estimate
7 of the time required to implement the process, an estimated cost of the process, or a
8 proposal regarding how the costs of the process would be recovered.⁶¹

9

10 **Q. Does Dr. Stanton provide her perspective regarding the determination as to whether**
11 **a given plan includes a prudent mix of contracts?**

12 A. In a separate section of her direct testimony, Dr. Stanton states, "An appropriate analysis
13 to determine a prudent mix of contracts would be an all-resource Request for Proposals
14 followed by Integrated Resource Modelling to determine the least cost mix of resources
15 that meet the Company's other requirements including its AECs obligation."⁶²

16

17 **Q. Does Dr. Stanton provide any detail regarding her recommended "all-resource**
18 **Request for Proposals followed by Integrated Resource Modelling?"**

⁶¹ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-23. (Exhibit SGF-1R)

⁶² Direct Testimony of Elizabeth Stanton, p. 8.

1 A. No. Once again, Dr. Stanton's recommendation is insufficiently defined. When asked about
2 her recommended "all-resource Request for Proposals" during the discovery process, Dr.
3 Stanton was unable to provide any detail about the design, the types of eligible resources,
4 the products that would be solicited, the contract terms, the qualification requirements, the
5 basis for selection of the winning bidders, or how definitional differences between the
6 different types of products would be considered.⁶³ Furthermore, when asked about her
7 recommended "Integrated Resource Modelling" during the discovery process, Dr. Stanton
8 was unable to describe the process to develop the associated model(s), the necessary
9 modeling assumptions and market forecasts, how the modeling assumptions and market
10 forecasts would be agreed upon, what stakeholders would be involved, who would be
11 responsible for coding and running the model, what specific outputs would be measured
12 by the modeling, how these measurements would be factored or weighted, who would be
13 responsible for approving the results of the model, or the timing of approval of the results
14 of the model.⁶⁴ And, regarding her recommended overall "all-resource Request for
15 Proposals followed by Integrated Resource Modelling," Dr. Stanton could not provide an
16 estimate of the time required to develop and implement the process, an estimated cost of
17 the process, or a proposal regarding how the costs of the process would be recovered.⁶⁵
18 Finally, when asked in discovery, Dr. Stanton could not identify an instance in

⁶³ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-3. (Exhibit SGF-1R)

⁶⁴ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-4, I-5. (Exhibit SGF-1R)

⁶⁵ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-6. (Exhibit SGF-1R)

1 Pennsylvania,⁶⁶ or in any U.S. jurisdiction in which the electricity industry has been
2 restructured and customers are afforded retail access, where her recommended process was
3 required as a condition of the approval of a default service plan.⁶⁷
4

5 **Q. Does Dr. Stanton address the requirements for Commission approval of Duquesne**
6 **Light's default service plan?**

7 A. No. When asked in discovery whether Dr. Stanton was aware of an example of any
8 Pennsylvania utility default service plan approved by the Commission for which approval
9 required implementation of Dr. Stanton's recommended process, Dr. Stanton simply
10 responded, "Dr. Stanton's testimony does not address requirements for Commission
11 approval."⁶⁸ If one accepts Dr. Stanton's stated position that her testimony does not address
12 the requirements for Commission approval of Duquesne Light's Plan, there is little reason
13 to consider her testimony when deciding whether Duquesne Light's Plan satisfies the
14 requirements for Commission approval.
15

16 **Q. Does Duquesne Light's Plan address the requirements for Commission approval?**

17 A. Yes. As described by Duquesne Light witness C. James Davis in Duquesne Light Statement
18 No. 1, Duquesne Light developed its Plan to satisfy the requirements of Act 129 and, in

⁶⁶ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-8. (Exhibit SGF-1R)

⁶⁷ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-9. (Exhibit SGF-1R)

⁶⁸ MAREC Action's Responses to Duquesne Light Company's Set I Interrogatories and Data Requests, I-8. (Exhibit SGF-1R)

1 developing the Plan, Duquesne Light was guided by the Second Default Service
2 Rulemaking Order,⁶⁹ which the Commission entered to provide guidance with respect to
3 the interpretation of Act 129's requirements.⁷⁰ Mr. Davis explains that Duquesne Light also
4 considered the Commission's guidance in the *January 2020 Secretarial Letter* in the
5 Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms,⁷¹
6 and it addresses the requests in the *January 2020 Secretarial Letter*.⁷² Furthermore, as I
7 explained in my direct testimony, Duquesne Light's proposed Default Service Plan
8 incorporates a prudent mix of contracts, and includes prudent steps necessary to obtain
9 least cost generation supply contracts, as required by Section 2807(e)(3.4) and Section
10 2807(e)(3.7) of Act 129.⁷³

11
12 **Q. Given all of these considerations, what do you conclude about Dr. Stanton's**
13 **recommendation for the Commission to initiate a separate stakeholder effort to**
14 **redesign Duquesne Light's default service product mix?**

15 A. Dr. Stanton's recommendation should be rejected. Her recommendation is unnecessary, is
16 insufficiently defined, and would add costs and jeopardize the timely implementation of a
17 default service plan that complies with the requirements of Act 129.

⁶⁹ *Default Service and Retail Electric Markets*, Docket No. L-2009-2095604 (Order entered October 4, 2011) ("Second Default Service Rulemaking Order").

⁷⁰ Duquesne Light Statement No. 1, pp. 5-6.

⁷¹ *Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms*, Docket No. M-2019-3007101, Secretarial Letter issued January 23, 2020 ("January 2020 Secretarial Letter").

⁷² Duquesne Light Statement No. 1, pp. 6-7.

⁷³ Duquesne Light Statement No. 3, pp. 23-26.

1

2 **IV. EGS Parties' Recommendation, that Duquesne Light Revise the SOP to Require New**
3 **or Moving Customers Calling to Initiate Service to Choose Only an EGS Service**
4 **Option, Raises Legitimate Public Policy Concerns with the Potential for Significant**
5 **Customer Harm and Should Be Rejected**

6 **Q. Please summarize EGS Parties witness Kallaher's recommendation to revise the**
7 **enrollment process in Duquesne Light's SOP.**

8 A. Mr. Kallaher's precise recommendation is somewhat unclear. On page 4 of his direct
9 testimony, Mr. Kallaher states that Duquesne Light should revise its SOP to require that
10 new and moving customers choose among several options for service from an EGS rather
11 than default service.⁷⁴ On page 15 of his direct testimony, he states that Duquesne Light
12 should revise its SOP to require that new and moving customers calling to initiate service
13 be placed automatically into the SOP.⁷⁵

14

15 **Q. Why do you say Mr. Kallaher's precise recommendation is unclear?**

16 A. It is unclear what is meant by requiring that new and moving customers choose among
17 several options of service from an EGS if they are placed automatically into the SOP. The
18 SOP is a standardized product during the initial year of enrollment and is offered by a
19 subset of EGSs serving customers in Duquesne Light's service area (i.e., not all EGSs
20 participate in the SOP). Currently, new and moving customers that call to initiate service
21 in Duquesne Light's service area have three service options:

⁷⁴ EGS Parties' Statement No. 1, p. 4.

⁷⁵ EGS Parties' Statement No. 1, p. 15.

- 1 1. Choose to participate in the SOP,
- 2 2. Select an EGS or continue service with an EGS outside of the SOP, or
- 3 3. Receive supply under Duquesne Light's default service.

4 It is not clear whether Mr. Kallaher's recommendation on page 15 of his direct testimony
5 to require that "new and moving customers calling to initiate service be placed
6 automatically into the SOP" would preclude the second option, allowing customers to
7 select an EGS or continue service with an EGS outside of the SOP. I doubt that was Mr.
8 Kallaher's intent.⁷⁶ In any event, according to Mr. Kallaher's recommendation, it appears
9 that new and moving customers calling to initiate service would no longer be permitted to
10 receive supply under Duquesne Light's default service, at least initially. In other words, all
11 new and moving customers would be forced to switch to an EGS whether or not they desire
12 to do so. As Mr. Kallaher states, "this is to start all new and moving customers off on
13 competitive supply with an EGS."⁷⁷

14
15 **Q. Do you support Mr. Kallaher's recommendation that new or moving customers**
16 **calling to initiate service be required to take service from an EGS?**

17 A. No. First, as I will describe further below, the Mr. Kallaher's recommendation raises
18 legitimate public policy concerns with the potential for significant customer harm and
19 should be rejected.

⁷⁶ Mr. Kallaher states, "In fact, I see no reason to limit the EGS options offered by AllConnect to new and moving customers just to the SOP. New and moving customers can and should be offered a wide range of EGS options." (EGS Parties' Statement No. 1, p. 16.)

⁷⁷ EGS Parties' Statement No. 1, p. 16.

1 Second, EGS Parties' recommendation also appears to circumvent the customer
2 protection of default service provided by Act 129 by forcing customers to choose an EGS.

3 Act 129 states:

4 Following the expiration of an electric distribution company's obligation
5 to provide electric generation supply service to retail customers at capped
6 rates, if a customer contracts for electric generation supply service and the
7 chosen electric generation supplier does not provide the service or if a
8 customer does not choose an alternative electric generation supplier, the
9 default service provider shall provide electric generation supply service to
10 that customer pursuant to a commission-approved competitive
11 procurement plan.⁷⁸

12 Default service is provided by Duquesne Light under a Commission-approved competitive
13 procurement plan taking into account the benefits of price stability. Mr. Kallaher would
14 require that new and moving customers choose EGS service rather than default service.⁷⁹
15 This denies customers their right to choose default service.

16 Third, Mr. Kallaher's recommendation represents a significant departure from the
17 SOP model that the Commission has adopted for major Pennsylvania utilities. This model
18 was discussed at length by numerous stakeholders in a state-wide, Commission-led
19 process. The Commission recognized at the time that the structure of the customer referral
20 program was a "somewhat contentious" issue⁸⁰ and the Commission set forth clear
21 guidelines for EDCs to follow, including that, "The Standard Offer Customer Referral
22 Program should be voluntary for customers, i.e., 'opt-in', as well as for participating

⁷⁸ 66 Pa. C.S. § 2807(e)(3.1). (Emphasis added.)

⁷⁹ EGS Parties' Statement No. 1, p. 4.

⁸⁰ Final Order, *Investigation of Pennsylvania's Retail Electricity Market Recommendations Regarding Upcoming Default Service Plans*, Docket I-2011-2237952, December 16, 2011, pp. 43-44.

1 EGSs.”⁸¹ Mr. Kallaher’s recommendation directly conflicts with the Commission’s SOP
2 guidelines. Significant changes in the overall structure of the Commission-approved SOP
3 model should be considered with caution and such changes should not adopted on an *ad*
4 *hoc* basis.

5
6 **Q. Why does Mr. Kallaher recommend that new or moving customers calling to initiate**
7 **service be required to take service from an EGS?**

8 A. Mr. Kallaher explains, “The treatment of new and moving customers in competitive energy
9 markets is a concern of long standing. In most states with a hybrid form of competition, in
10 which the distribution utility competes with non-utility retailers for commodity sales, new
11 and moving customers are required to be placed on the utility’s commodity service when
12 they contact the utility to initiate distribution service.”⁸²

13
14 **Q. Is Mr. Kallaher’s rationale applicable to Duquesne Light’s service area?**

15 A. No. As noted above, Duquesne Light does not require new or moving customers to be
16 placed on default service when they contact Duquesne Light to initiate distribution service.
17 Customers can enroll directly into the SOP or choose EGS service outside of the SOP
18 without receiving default service from Duquesne Light.⁸³ Furthermore, as part of its DSP

⁸¹ Final Order, *Investigation of Pennsylvania’s Retail Electricity Market: Intermediate Work Plan*, Docket I-2011-2237952, Adopted March, 1, 2012, p. 31.

⁸² EGS Parties’ Statement No. 1, p. 15. (Emphasis added.)

⁸³ In Pennsylvania, the Commission required EDCs to file and implement a plan to facilitate moving EGS service with the customer when the customer moves within the EDC territory rather than returning the customer to default service within the move, i.e., seamless moves. In addition, the order established that a new customer could choose service from an EGS and enroll with the EGS on the day the customer starts new service with the EDC, i.e., instant

1 V settlement agreement, Duquesne Light agreed that in the new customer packet and any
2 other materials relating to new service, Duquesne Light would advise new customers upon
3 service initiation of the opportunity to obtain supply from an EGS.⁸⁴ Therefore, the
4 condition that Mr. Kallaher explicitly states he is trying to remedy with his
5 recommendation simply does not exist in Duquesne Light's service area.

6
7 **Q. Does Mr. Kallaher present any other argument for his recommendation that new or**
8 **moving customers calling to initiate service be required to take service from an EGS?**

9 A. Yes. To support this recommendation, Mr. Kallaher makes claims regarding the direction
10 of the competitive retail market in Pennsylvania, including in Duquesne Light's service
11 area.⁸⁵ In fact, Mr. Kallaher makes these claims in his attempt to justify all of the
12 recommendations that he makes in his direct testimony.⁸⁶

13

connects. (*Investigation of Pennsylvania's Retail Electricity Market: End State of Default Service*, Docket No. 1-2011-2237952, February 15, 2013, pp. 70, 74.) Seamless moves and instant connects are permitted by Duquesne Light as specified in the General Provisions, Sections 45.3 and 45.4, of the Company's Retail Tariff.

⁸⁴ Settlement Agreement, *Petition of DLC for Approval of Default Service Plan for the Period January 1, 2011 through May 31, 2013*, Paragraph 26, pp. 8-10, Signed by Parties in February 2010. Duquesne Light witness Michelle R. Sandoe described this new or moving customer program in more detail as part of the Company's DSP VI filing. As described by Ms. Sandoe, in order to advise residential new customers and moving customers of their opportunity to choose a supplier, Duquesne Light plans to promote shopping via its "New Mover Packet." This packet contains a variety of useful information for new customers including a section on customer choice. The customer choice section reinforces that electric customers in Pennsylvania have the option to choose their electric supplier and that EGSs may offer lower prices or other options such as green electric generation. It refers customers to both the Commission's website and the OCA's electric shopping guide at www.oa.state.pa.us. Phone numbers for both the Commission and the OCA are provided on their respective websites. Lastly, it informs customers that no matter from whom they buy their power, the reliability and quality of their local distribution service will not change. (*Petition of Duquesne Light Company For Approval Of Default Service Plan For The Period June 1, 2013 Through May 31, 2015*, Docket P-2012-2301664, Duquesne Light Statement No. 5, p. 5.)

⁸⁵ EGS Parties' Statement No. 1, pp. 4-9.

⁸⁶ EGS Parties' Statement No. 1, p. 9.

1 **Q. Please summarize Mr. Kallaher's claims regarding the direction of the competitive**
2 **retail market in Pennsylvania, including in Duquesne Light's service area, which he**
3 **makes to justify his recommendations.**

4 A. According to Mr. Kallaher, the competitive market for electricity in Pennsylvania is not
5 functioning as was envisioned,⁸⁷ and he claims that the electricity market in Pennsylvania
6 generally, and the Duquesne service area specifically, is in stagnation at best, and in decline
7 at worst.⁸⁸ To support his claim, Mr. Kallaher states that out of about 540,000 residential
8 customers in the Duquesne Light service area, only about 148,000, or 27.5%, are taking
9 service from an EGS.⁸⁹ According to Mr. Kallaher, the causes of the alleged stagnation in
10 the competitive market are structural flaws in the design of the retail market, including the
11 presence of Duquesne Light as a "domineering" default service provider.⁹⁰ Mr. Kallaher
12 claims that the very presence of a default service provider that is also the local
13 transmission-and-distribution monopoly results in what he characterizes as "a provider-of-
14 first resort arrangement."⁹¹ While Mr. Kallaher notes that about 67% of the total load in
15 Duquesne Light's service area is being served by EGSs, he states that product innovation
16 in the mass market sector has been virtually nonexistent and EGS prices are compared to
17 and, in some instances, capped by default service rates.⁹² Mr. Kallaher laments that the
18 "perceived lack of value in the competitive market" is driven by faulty market design and

⁸⁷ EGS Parties' Statement No. 1, p. 4.

⁸⁸ EGS Parties' Statement No. 1, p. 5.

⁸⁹ EGS Parties' Statement No. 1, p. 5.

⁹⁰ EGS Parties' Statement No. 1, p. 6.

⁹¹ EGS Parties' Statement No. 1, p. 6.

⁹² EGS Parties' Statement No. 1, p. 5.

1 due to “the incorrect notion, which has been promoted by utilities and regulators alike, that
2 the default service price is a reasonable proxy for a ‘market price’, which it clearly is not.”⁹³
3

4 **Q. Does Duquesne Light’s Plan support the competitive retail electricity market?**

5 A. Yes. In my direct testimony, I explain in detail the ways in which Duquesne Light’s plan
6 is designed to support the competitive retail electricity market.⁹⁴ Under Duquesne Light’s
7 Plan, to the extent that EGSs are able to develop new value-added or tailored services (such
8 as a service offering that is supplied entirely by clean power) to meet the needs of individual
9 customers, or to the extent that they can assemble a low-cost supply portfolio and offer
10 customers an attractive price, these EGSs may attract customers, and customers will
11 receive benefits associated with retail competition. Furthermore, the price-to-compare
12 benchmark will reflect the lowest prices offered in competitive supply solicitations, thereby
13 encouraging the development of the most competitively priced offers from EGSs. At the
14 same time, Duquesne Light’s plan is designed to provide stable prices based on competitive
15 supply solicitations for mass market default service customers who do not have the time,
16 energy, sophistication, or resources to seek out and confidently choose an offering from an
17 EGS that provides the type of product or the level of price stability that the customer needs
18 or desires.⁹⁵ This approach is well aligned with the Commission’s established policy

⁹³ EGS Parties’ Statement No. 1, p. 8.

⁹⁴ Duquesne Light Statement No. 3, p. 28. Mr. Kallaher also acknowledges that Duquesne Light has taken actions to support a competitive retail electricity market. “I would like to note at this point that I do not attribute these trends solely or even predominantly to an anti-market animus on the part of Duquesne Light Company. If anything, Duquesne, which owns no generation and has no competitive retail or wholesale affiliate, maintains a position in the Pennsylvania electric market that is less conflicted than other Pennsylvania EDCs.” (EGS Parties’ Statement No. 1, pp. 8-9.)

⁹⁵ Duquesne Light Statement No. 3, pp. 4, 7-16, 28.

1 objective of ensuring a cost for power that is both relatively stable and economical for
2 customers.⁹⁶

3
4 **Q. Does Mr. Kallaher's quoted number of residential customers being served by an EGS**
5 **indicate that a fundamental change in the SOP is needed so that all new or moving**
6 **customers are forced to take service with an EGS, as Mr. Kallaher recommends?**

7 A. No. Mr. Kallaher's suggestion, that the Commission should treat the number of customers
8 who have chosen to be served by an EGS as the measuring stick to determine the extent to
9 which customers are receiving the benefits of competition, and that fundamental changes
10 in the established SOP should be made on that basis, are misguided. If the primary policy
11 goal were to maximize the number of customers who are being served by an EGS, as Mr.
12 Kallaher suggests,⁹⁷ then policymakers in Pennsylvania could have achieved the policy
13 goal long ago by establishing very high or very volatile default service rates that likely
14 would be unattractive to mass market customers, or by simply assigning all customers to
15 EGSs without their permission. This, however, would not be good public policy, nor would
16 it be consistent with the requirements of Act 129.

17
18 **Q. Does Mr. Kallaher's quoted number of residential customers being served by an EGS,**
19 **or his characterization of Duquesne Light as a "dominant provider,"⁹⁸ in any way**

⁹⁶ *Second Default Service Rulemaking Order*, p. 40.

⁹⁷ EGS Parties' Statement No. 1, p. 5.

⁹⁸ EGS Parties' Statement No. 1, p. 9.

1 **indicate that default service customers in Duquesne Light's service area are not**
2 **receiving benefits from competitive markets?**

3 A. No. Under the existing default service model, regardless of how many customers are being
4 served through default service, they are all being provided benefits from competitive
5 markets because the model requires qualified bidders in the default service supply product
6 solicitations to compete and be selected based on the lowest price. Duquesne Light simply
7 passes through the resultant supply costs to customers. Any insinuation that a greater
8 number of default service customers equates to a less competitive default service offering
9 or a financial benefit to Duquesne Light is invalid. Furthermore, 91 EGSs currently serve
10 Duquesne Light customers,⁹⁹ 76 of these EGSs currently serve Duquesne Light residential
11 customers,¹⁰⁰ and 67% of Duquesne Light's total customer load is being served by an
12 EGS.¹⁰¹ Clearly, there are many options available to default service customers to take
13 advantage of the benefits of the competitive retail market, if they choose to do so.

14
15 **Q. Are there valid reasons why the numbers of Pennsylvania customers being served by**
16 **an EGS have decreased somewhat?**

17 A. Yes. Decreases in Pennsylvania indicate that customers who had previously made a choice
18 to be served by an EGS either subsequently decided instead to receive default service, or
19 their EGS chose to no longer serve them.

⁹⁹ Duquesne Light Company. This value is as of June 2020.

¹⁰⁰ Duquesne Light Company. This value is as of June 2020.

¹⁰¹ Duquesne Light Statement No. 3, p. 17. This value is as of March 2020.

1

2 **Q. Why may some customers have made reasonable decisions not to be served by an**
3 **EGS, thereby contributing to a decrease in customers being served by an EGS?**

4 A. In recent years, numerous studies have been issued that cite instances in several states in
5 which competitive retail suppliers have been charging significantly more than default
6 service rates and/or engaging in misleading marketing practices. CAUSE-PA witness
7 Harry Geller discusses several of these reports in his direct testimony.¹⁰² Mr. Geller also
8 presents his own analysis, which indicates that EGSs in Duquesne Light's service area have
9 on average consistently charged residential customers amounts significantly in excess of
10 default service rates over the past three years and five months using data that he received
11 from the Company during the discovery process.¹⁰³ Mr. Geller's analysis of charges from
12 January 2017 through May 2020 indicates that residential customers being provided service
13 by EGSs in Duquesne Light's service area were charged 32% (i.e., nearly \$102.9 million)
14 more than they would have paid over that same period if they had remained on default
15 service.¹⁰⁴ Furthermore, Mr. Geller's analysis indicates that this percentage has been
16 increasing over time, with EGS charges exceeding default service charges by 43% since
17 the beginning of 2019.¹⁰⁵ It is reasonable to conclude that the published reports and
18 associated public press, as well as first-hand customer experiences, relating to various

¹⁰² CAUSE-PA Statement No. 1, pp. 17-20.

¹⁰³ CAUSE-PA Statement No. 1, p. 9 (Chart 1), and CAUSE-PA Exhibit 1.

¹⁰⁴ CAUSE-PA Statement No. 1, p. 9 (Chart 1), and CAUSE-PA Exhibit 1. The calculation of the referenced percentage value, using values from CAUSE-PA Exhibit 1, can be found in SGF Exhibit-3R.

¹⁰⁵ CAUSE-PA Statement No. 1, p. 9 (Chart 1), and CAUSE-PA Exhibit 1. The calculation of the referenced percentage value, using values from CAUSE-PA Exhibit 1, can be found in SGF Exhibit-3R.

1 EGSs' excessive customer charges and/or misleading marketing practices, have had a
2 detrimental effect on the willingness of customers to elect service from an EGS,
3 contributing to a lower number of customers being served by an EGS.

4 Furthermore, for some residential and small commercial customers who have not
5 switched from default service to an EGS, the expected gains from learning more about
6 retail market choices may be too small to make the learning worthwhile. The potential cost
7 savings may be insufficient to divert customers' time from their other affairs to further
8 educate themselves about the retail electricity market and compare and analyze EGS offers.

9
10 **Q. Do either of these reasons justify adopting Mr. Kallaher's recommendation that new**
11 **or moving customers calling to initiate service be required to take service from an**
12 **EGS?**

13 **A.** No. There is no sound logic to force new or moving customers to be served by an EGS
14 because some customers elect to terminate service from an EGS based on their experiences,
15 or because some customers elect not to be served by an EGS based on information that
16 they receive or due to their other daily demands.

17
18 **Q. Have some EGSs exited the market, thereby contributing to the decrease in customers**
19 **being served by an EGS?**

1 A. Yes. Some EGSs exited the market in the aftermath of the wholesale market price spikes
2 experienced in January 2014, often referred to as the Winter 2014 Polar Vortex.¹⁰⁶ For
3 example, in August 2014, FirstEnergy Solutions (“FES”), a major competitive retail
4 supplier that served 2.7 million customers, announced that it was withdrawing from the
5 competitive residential and small commercial electric markets in six states.¹⁰⁷ It was
6 reported that FES had “allowed a large tranche of Duquesne Light customers in Pittsburgh
7 to lapse. The total number of Duquesne Light customers supplied by competitive power-
8 generators dropped by 36,000, or 15 percent, in a few months.”¹⁰⁸ According to FES, the
9 non-renewals of contracts would continue to 2019.¹⁰⁹ Around the same time, other
10 competitive suppliers went out of business due to unexpected wholesale market conditions,
11 and their customers were switched back to default service supply.¹¹⁰

12
13 **Q. Does the exit of an EGS such as FES in any way support Mr. Kallaher’s**
14 **recommendation that new or moving customers calling to initiate service be required**
15 **to take service from an EGS?**

16 A. No. FES cited volatility in the underlying wholesale market as the primary reason why it
17 was exiting the residential and small commercial retail electric markets. “Essentially what
18 we’re doing is de-risking our business...What we’ve seen, especially coming out of the

¹⁰⁶ Extreme cold weather, unplanned generator shutdowns, natural gas curtailments, and fuel-oil delivery problems contributed to record electricity prices in January 2014 in Pennsylvania.

¹⁰⁷ *FirstEnergy Backs Out of Residential Markets*, Megawatt Daily, August 11, 2014, p. 12.

¹⁰⁸ *FirstEnergy Solutions Dropping PECO Customers*, Philadelphia Inquirer, September 30, 2015.

¹⁰⁹ *FirstEnergy Solutions Dropping PECO Customers*, Philadelphia Inquirer, September 30, 2015.

¹¹⁰ *2013-2014 Winter Polar Vortex*, ConEdison Solutions, July 2014, p. 4.

1 polar vortex...is that volatility of the electric market is reducing our ability to offer long-
2 term stable pricing to customers...And it's also increasing our risk of serving retail load,"
3 explained Diane Francis, an FES spokeswoman.¹¹¹ In other words, the reason that FES cited
4 for its exit from the market was not related to any structural flaws in the design of the retail
5 market that Mr. Kallaher alleges to support his recommendation.

6
7 **Q. Why does Mr. Kallaher's recommendation, that the Commission require new or**
8 **moving customers calling to initiate service be required to take service from an EGS,**
9 **raise legitimate public policy concerns with the potential for significant customer**
10 **harm?**

11 A. Under the existing, established default service model, mass market customers who choose
12 not to shop, or who do not have the time, energy, sophistication, or resources to make an
13 informed service decision, are charged default service rates that reflect the cost of supply
14 from competitive wholesale solicitations, in which many parties compete to provide the
15 supply on the basis of lowest price. The selection of winning bidders is subject to
16 Commission approval, and the timing and definitions of the supply products that are
17 procured are established through a Commission proceeding in which the benefits of price
18 stability are considered. Consequently, these customers are provided stable rates
19 established through the competitive market with active Commission oversight.

20 In contrast, under Mr. Kallaher's proposal, new or moving customers would be
21 forced to choose or be involuntarily assigned to an EGS, and the same assurances cannot

¹¹¹ *FirstEnergy Backs Out of Residential Markets*, Megawatt Daily, August 11, 2014, pp. 12-13.

1 be made that the rates that the EGS charges would be as stable, subject to competitive
2 market forces, and subject to the same level of Commission oversight on an ongoing basis.
3 Under Mr. Kallaher's proposal, whenever the EGS is allowed to charge the new or moving
4 customer (that was forced to accept EGS service) rates at the EGS's discretion without
5 Commission approval of the rates (e.g., after the initial fixed-price period of the SOP), the
6 customer will be exposed to the potential loss of the stable, competitively-priced rate upon
7 which it relies. I believe there is an important distinction between a customer that
8 voluntarily and affirmatively elects to enroll with an EGS (either through the SOP or
9 another EGS offering) and a customer that is forced to enroll with an EGS and that therefore
10 may not have the time, incentive, knowledge, sophistication, or resources to make educated
11 electricity service choices going forward. A customer that does not voluntarily and
12 affirmatively elect service from an EGS should not be forced to accept service from an
13 EGS that subsequently can charge the customer whatever rate the EGS elects to charge,
14 without any Commission oversight.

15 The OCA elaborated on this contrast from the perspective of a consumer advocate
16 in its 2011 comments to the Commission:

17 In the OCA's view, the means to address customer reluctance to actively
18 engage in the retail market is not to eliminate the default service model or
19 force the removal of the EDC from the default service role. It is the EDC
20 that has the obligation to connect every single household, business and
21 industry in Pennsylvania to the electric grid, and it is the EDC that is
22 ultimately responsible for the provision of safe, adequate, and reliable
23 electric service. With these ultimate responsibilities, it is difficult to
24 envision any generic cost benefit from replacing the EDC as default
25 service provider with another entity, and in particular, with an entity that
26 must seek to earn a profit from the default service role. Default service
27 customers are currently able to receive fairly stable, reasonably priced
28 generation service from their EDC. At the same time, customers who

1 choose to shop for an alternative generation supplier may be able to find
2 an offer that is more suitable for them. Default service customers continue
3 to receive the benefit of wholesale generation markets through the
4 competitive least cost procurement process of Act 129, even if they do not
5 choose to shop with an alternative retail supplier. But shopping customers
6 also receive the benefit of knowing that there is a Commission-approved
7 default service provider that must provide them with service at a
8 Commission-approved price if their competitive supplier fails or decides
9 to leave the Pennsylvania market. In the OCA's view, this "security"
10 feature of default service enhances the competitive market in Pennsylvania
11 because it permits customers to participate in the market without fear of
12 jeopardizing their service.¹¹²

13 The protections described above, which are ensured in the existing default service
14 model, would be jeopardized for new or moving customers under Mr. Kallaher's
15 recommendation.

16
17 **Q. Are there factors that magnify this potential for significant customer harm under Mr.**
18 **Kallaher's proposal?**

19 A. Yes. First, the numerous studies cited by CAUSE-PA witness Geller, which identify
20 instances in several states in which competitive retail suppliers have been charging
21 significantly more than default service rates and/or engaging in misleading marketing
22 practices, cast doubt on the ability to rely upon EGSs to charge rates reflective of "least
23 cost" on an ongoing basis to new or moving customers that are forced to accept service
24 from an EGS.¹¹³ Furthermore, the results of Mr. Geller's analysis of EGS charges in

¹¹² Comments of the OCA, *Investigation of Pennsylvania's Retail Electricity Market*, Docket No. I-2011-2237952, June 3, 2011, pp. 19-20. (Emphasis added.)

¹¹³ CAUSE-PA Statement No. 1, pp. 17-20.

1 Duquesne Light's service area further magnifies these concerns. As I mentioned
2 previously, Mr. Geller's analysis indicates that EGSs in Duquesne Light's service area
3 have on average consistently charged residential customers amounts significantly in excess
4 of default service rates.¹¹⁴ Mr. Geller's analysis of charges from January 2017 through May
5 2020 indicates that residential customers being provided service by EGSs in Duquesne
6 Light's service area were charged 32% (i.e., nearly \$102.9 million) more than they would
7 have paid over that same period if they had remained on default service.¹¹⁵ Furthermore,
8 Mr. Geller's analysis indicates that this percentage has been increasing over time, with
9 EGS charges exceeding default service charges by 43% since the beginning of 2019.¹¹⁶ Mr.
10 Geller's findings are particularly concerning when combined with Mr. Kallaher's
11 observation that product innovation has been virtually nonexistent in the mass market
12 sector.¹¹⁷ This begs the question: if EGSs are not providing innovative, value-added
13 products, why are residential customers who are being served by EGSs paying substantially
14 more than they would pay for default service?

15 Second, to the extent that some customers tend not to make a decision regarding
16 their service unless they are forced to do so, the risk to customers of being significantly
17 harmed is even further magnified. Specifically, instead of tending to remain on a stable
18 default service rate established through competitive solicitations with significant
19 Commission oversight, under Mr. Kallaher's proposal the new or moving customer would

¹¹⁴ CAUSE-PA Statement No. 1, p. 9 (Chart 1), and CAUSE-PA Exhibit 1.

¹¹⁵ CAUSE-PA Statement No. 1, p. 9 (Chart 1), and CAUSE-PA Exhibit 1. The calculation of the referenced percentage value, using values from CAUSE-PA Exhibit 1, can be found in SGF Exhibit-3R.

¹¹⁶ CAUSE-PA Statement No. 1, p. 9 (Chart 1), and CAUSE-PA Exhibit 1. The calculation of the referenced percentage value, using values from CAUSE-PA Exhibit 1, can be found in SGF Exhibit-3R.

¹¹⁷ EGS Parties' Statement No. 1, p. 5.

1 tend to remain on a rate charged by an EGS without the same assurances regarding
2 competitive pricing, rate stability, and Commission oversight over time.

3
4 **Q. Do you have any comments regarding Mr. Kallaher's claim that new or moving**
5 **customers calling to initiate service be required to take service from an EGS because,**
6 **according to Mr. Kallaher, EGSs currently face an "unlevel playing field"?¹¹⁸**

7 A. Duquesne Light has already implemented multiple rounds of rate unbundling, most
8 recently in the Company's DSP VIII Settlement, which included as a party the Retail
9 Energy Supply Association. This unbundling reduced current base distribution rates and
10 increased default service rates based on costs agreed to by the parties.¹¹⁹ Furthermore, in
11 arguing that EGSs currently face an "unlevel playing field,"¹²⁰ Mr. Kallaher ignores the
12 fact that the default service rate implicitly includes compensation for FPCR default service
13 product suppliers for a special option that they provide to customers at their expense, which
14 EGSs are not required to provide. Specifically, unlike EGSs, suppliers of the FPCR
15 products that comprise Duquesne Light's default service supply must stand ready to serve
16 their percentage of the default service load at a predetermined fixed price, regardless of
17 how frequently customers switch to or from default service in response to market
18 conditions or for any other reason. Customers have an incentive to elect service from an
19 EGS when the default service rate is higher than the prices that EGSs offer, and they have

¹¹⁸ EGS Parties' Statement No. 1, p. 6.

¹¹⁹ *Petition of Duquesne Light Company for Approval of a Default Service Plan for the Period June 1, 2017 to May 31, 2021*, Docket No. P-2016-2543140, September 23, 2016, Section II. B.

¹²⁰ EGS Parties' Statement No. 1, p. 6.

1 an incentive to elect default service when the rate is lower than those prices. This customer
2 switching option (to guarantee a predetermined fixed price to which customers may return
3 and from which they may leave) can be very valuable for customers, but can be costly to
4 the seller of the FPFR default service supply product given the need to provide additional
5 supply when market prices are high and/or manage excess supply when market prices are
6 low. Logically, it can be expected that FPFR bidders will include some compensation in
7 their bid prices to cover the costs and risks associated with providing this option.

8
9 **Q. Given all of these considerations, what do you conclude regarding EGS Parties’**
10 **recommendation that new or moving customers calling to initiate service be required**
11 **to take service from an EGS?**

12 **A.** EGS Parties’ recommendation raises legitimate public policy concerns with the potential
13 for significant customer harm and should be rejected. Instead of catering to EGS Parties’
14 desire to force customers to take service from EGSs, the Commission should continue to
15 balance the interests of customers, EGSs, default service suppliers, and the default service
16 provider when considering a default service plan.

17
18 **V. Implementation of CAUSE-PA’s Recommendation to Return SOP Customers to**
19 **Default Service at the End of the 12-Month SOP Term, If They Do Not Otherwise**
20 **Make an Affirmative Decision, Would Conflict with the Commission’s Standard SOP**
21 **Guidance**

22 **Q. Mr. Geller recommends that Duquesne Light amend its SOP to return customers to**
23 **default service if they do not make an affirmative decision to stay with their current**

1 **EGS or select a new EGS at the end of the 12-month SOP contract.¹²¹ Do you have**
2 **any comments?**

3 A. Yes. In prior default service filings, the Company expressed similar concerns about the
4 way customer referral programs are structured and the ease with which customers, in some
5 instances, are deemed to “accept” a contract at unregulated rates not subject to Commission
6 review without their affirmative consent.¹²² Also, in a statewide proceeding in the early
7 stages of the development of the SOP, the Company stated, “The customer referral program
8 should provide assurances that there are not ‘bait-and-switch’ offers that could result in
9 high rates and customer dissatisfaction with retail choice. Adequate customer safeguards
10 need to be in place to make certain that customers are informed and affirmatively agree to
11 any changes in rates that are not subject to Commission oversight.”¹²³ Ultimately, however,
12 Duquesne Light followed the Commission’s clear SOP guidelines that stated, “At the
13 conclusion of the Standard Offer period, absent affirmative customer action to enter into a
14 new contract with the EGS, the customer’s enrollment with a different EGS or the
15 customer’s return to default service, the customer will remain with the EGS on a month-
16 to-month basis, and shall not be subject to any termination penalty or fee.”¹²⁴ Mr. Geller
17 cites new evidence of excessive residential EGS charges to support his recommendation to

¹²¹ CAUSE-PA Statement No. 1, p. 30.

¹²² *Petition of Duquesne Light Company for Approval of Default Service Plan for the Period January 1, 2008 Through December 31, 2010*, Docket P-00072247, Duquesne Light Statement No. 3-R, April 13, 2007, pp. 57-58. See also *Petition of Duquesne Light Company for Approval of Default Service Plan for the Period January 1, 2011 Through May 31, 2013*, Docket P-2009-2135500, Duquesne Light Statement No. 3-R, January 19, 2010, pp. 40-41.

¹²³ Duquesne Light Comments, *Investigation of Pennsylvania’s Retail Electricity Market: Comments of Duquesne Light Company on En Banc Hearing*, Docket No: 1-2011-2237952, November 23, 2011, p. 7.

¹²⁴ Final Order, *Investigation of Pennsylvania’s Retail Electricity Market: Intermediate Work Plan*, Docket I-2011-2237952, Adopted March 1, 2012, p. 32.

1 return SOP customers to default service if they do not make an affirmative decision to stay
2 with their current EGS or select a new EGS at the end of the 12-month SOP contract.¹²⁵
3 While Mr. Geller's evidence is concerning, his recommendation directly conflicts with the
4 Commission's guidance.

5

6 **Q. Does this conclude your direct testimony?**

7 **A. Yes, it does.**

¹²⁵ CAUSE-PA Statement No. 1, pp. 7-16, 29-30.

Exhibit SGF- 1R

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-3

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation."

- a) Define the term, "all-resource Request for Proposals," as used in this sentence.
- b) Describe in detail how the design of the "all-resource Request for Proposals" would be developed.
- c) Describe in detail the process to implement the "all-resource Request for Proposals."
- d) Would the "all-resource Request for Proposals" include all generation resources, including non-renewable generating resources?
- e) Would the "all-resource Request for Proposals" include all zero carbon generating resources (e.g., solar, wind, nuclear, hydro)?
- f) Would the "all-resource Request for Proposals" include non-generation resources (e.g., energy storage, demand-side resources)?
- g) What products would be solicited in the "all-resource Request for Proposals"?
- h) Would both new and existing resources be considered in the "all-resource Request for Proposals"?
- i) What would be the contract terms for the "all-resource Request for Proposals," including both contract term lengths and other terms of the contracts?
- j) What would be the qualification requirements for bidders in the "all-resource Request for Proposals"?
- k) On what basis would winning bidders be selected in the "all-resource Request for Proposals"?
- l) How would definitional differences between the different types of products (e.g., the timing of the energy supplied, the quantity of PJM capacity credits supplied per MWh, ancillary services supplied, etc.) be considered in the selection of the winning bidders?

Response:

- a) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.¹

¹ Wilson, J. et al. April 2020. "Making the Most of the Power Plant Market: Best Practices for All-Source Electric Generation Procurement." *Energy Innovation*. Available at: <https://energyinnovation.org/wp-content/uploads/2020/04/All-Source-Utility-Electricity-Generation-Procurement-Best-Practices.pdf>.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

- b) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- c) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- d) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- e) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- f) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- g) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- h) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- i) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- j) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- k) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- l) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-4

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation." Describe the "Integrated Resource Modelling to determine the least cost mix of resources" in detail, including the process to develop the associated model(s), the necessary modeling assumptions and market forecasts, how the modeling assumptions and market forecasts would be agreed upon, what stakeholders would be involved, who would be responsible for coding and running the model, who would be responsible for approving the results of the model, and the timing of approval of the results of the model.

Response:

Dr. Stanton's testimony does not provide instructions on how to conduct an IRP. For information on this subject please see RAP's June 2013 Report.²

² Wilson, R. et al. June 2013. "Best Practices in Electric Utility Integrated Resource Planning." *Prepared for the Regulatory Assistance Project*. Available at: <https://www.raonline.org/wp-content/uploads/2016/05/rapsynapse-wilsonbiewald-bestpracticesinirp-2013-jun-21.pdf>.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-5

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation." Exactly what specific outputs would be measured by the modeling, and exactly how would these measurements be factored or weighted to determine whether a given mix of resources is "least cost" given any competing considerations in this determination.

Response:

Dr. Stanton's testimony does not provide instructions on how to conduct an all-resource RFP or an IRP. For information on this subject please see RAP's June 2013 Report,³ and Energy Innovation's April 2020 Report.⁴

³ Wilson, R. et al. June 2013. "Best Practices in Electric Utility Integrated Resource Planning." *Prepared for the Regulatory Assistance Project*. Available at: <https://www.raponline.org/wp-content/uploads/2016/05/rapsynapse-wilsonbiewald-bestpracticesinirp-2013-jun-21.pdf>.

⁴ Wilson, J. et al. April 2020. "Making the Most of the Power Plant Market: Best Practices for All-Source Electric Generation Procurement." *Energy Innovation*. Available at: <https://energyinnovation.org/wp-content/uploads/2020/04/All-Source-Utility-Electricity-Generation-Procurement-Best-Practices.pdf>.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-6

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation."

- a) Did Dr. Stanton estimate the time required to develop the detailed plan for the "all-resource Request for Proposals followed by Integrated Resource Modelling"? If so, how long would this require?
- b) Did Dr. Stanton estimate the time required to implement the "all-resource Request for Proposals followed by Integrated Resource Modelling," including the time required to obtain necessary approvals? If so, how long would this require?
- c) Did Dr. Stanton estimate the cost to develop and implement the "all-resource Request for Proposals followed by Integrated Resource Modelling"? If so, provide any cost estimates and any support for those cost estimates.
- d) Under Dr. Stanton's recommendation, who would pay for the costs of developing and implementing the "all-resource Request for Proposals followed by Integrated Resource Modelling"? How would the recovery of such costs be allocated?

Response:

- a) No.
- b) No.
- c) No.
- d) Dr. Stanton's recommendation does not address these costs. For information on this subject please see Energy Innovation's April 2020 Report.⁵

⁵ Wilson, J. et al. April 2020. "Making the Most of the Power Plant Market: Best Practices for All-Source Electric Generation Procurement." *Energy Innovation*. Available at: <https://energyinnovation.org/wp-content/uploads/2020/04/All-Source-Utility-Electricity-Generation-Procurement-Best-Practices.pdf>.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-8

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation." Is Dr. Stanton aware of any Pennsylvania utility default service plan approved by the Commission for which approval required "an all-resource Request for Proposals followed by Integrated Resource Modelling"? If so, please identify the utility and docket number.

Response:

Dr. Stanton's testimony does not address requirements for Commission approval.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-9

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation." Is Dr. Stanton aware of any instance in any U.S. jurisdiction in which the electricity industry has been restructured and customers are afforded retail access, where "an all-resource Request for Proposals followed by Integrated Resource Modelling" was required as a condition of the approval of the default service plan in that jurisdiction? Identify any such jurisdiction, utility, and docket number.

Response:

Dr. Stanton's testimony does not address RFPs and IRP in other jurisdictions.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-12

Reference page 11, lines 14-19 (Table 1) of Dr. Stanton's direct testimony. Please provide all workpapers, electronic files (with formulas intact), assumptions (with sources cited), and calculations that were utilized to calculate the values shown in Table 1.

Response:

Table 1 in Dr. Stanton's testimony is reproduced from the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-14

Reference page 11, lines 14-19 (Table 1) of Dr. Stanton's direct testimony. For each of the "Low," "Base," and "High" natural gas price scenarios, for each year of the 20 years modeled, please provide the percentage of hours in which it is assumed that natural gas fired generating units set the market price for electricity.

Response:

Please refer to the source of the analysis referred to in Table 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-15

Reference page 12, lines 12-17 (Table 2) of Dr. Stanton's direct testimony. Please provide all workpapers, electronic files (with formulas intact), assumptions (with sources cited), and calculations that were used to calculate the values shown in Table 2.

Response:

Please refer to the source of the analysis referred to in Table 2 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-16

Reference page 13, lines 8-13 (Figure 1) of Dr. Stanton's direct testimony. Please provide all workpapers, electronic files (with formulas intact), assumptions (with sources cited), and calculations that were used to calculate the values shown in Figure 1.

Response:

Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-18

Reference page 13, lines 8-13 (Figure 1) of Dr. Stanton's direct testimony.

- a) Please identify all of the assumed winning full requirements default service supply bid prices for each Duquesne Light customer class, in terms of \$/MWh, throughout the 2018-2027 period, that were used to develop the "High Auction" trend.
- b) Please identify all of the assumed winning full requirements default service supply bid prices for each Duquesne Light customer class, in terms of \$/MWh, throughout the 2018-2027 period, that were used to develop the "Base Auction" trend.
- c) Please identify all of the assumed winning full requirements default service supply bid prices for each Duquesne Light customer class, in terms of \$/MWh, throughout the 2018-2027 period, that were used to develop the "Low Auction" trend.
- d) Please identify the assumed natural gas prices, in terms of \$/MMBtu, throughout the 2018-2027 period, that were used to develop the "High Auction" trend.
- e) Please identify the assumed natural gas prices, in terms of \$/MMBtu, throughout the 2018-2027 period, that were used to develop the "Base Auction" trend.
- f) Please identify the assumed natural gas prices, in terms of \$/MMBtu, throughout the 2018-2027 period, that were used to develop the "Low Auction" trend.

Response:

- a) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.
- b) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.
- c) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.
- d) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.
- e) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

- f) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-20

Reference page 32, lines 14-15 of Dr. Stanton's direct testimony, where Dr. Stanton states, "I recommend that the Commission require Duquesne to do issue [sic] a bundled renewables RFP."

- a) Define the term, "bundled renewables RFP," as used in this sentence.
- b) What attributes other than AECs would be supplied through the contracts solicited in the "bundled renewables RFP"?
- c) What would be the term length of the contracts solicited in the "bundled renewables RFP"?
- d) Would zero carbon resources (other than solar and wind) be allowed to participate in the "bundled renewables RFP"? If so, specifically which types of zero carbon resources would be allowed to participate?
- e) Would both new and existing resources be allowed to participate in the "bundled renewables RFP"?
- f) Would the long-term contracts solicited in the "bundled renewables RFP" be fixed-price, full requirements supply contracts for a percent of Duquesne Light's default service load similar to the 12-month and 24-month products that Duquesne Light currently purchases (except limited to renewable suppliers and with longer contract terms)? If not, explain how the differences between the supply provided and the supply requirements for the default service load would be satisfied.
- g) Describe the differences between Dr. Stanton's recommendation to "issue a bundled renewables RFP" and Duquesne Light's proposal to enter into a long-term contract to support a utility-scale solar project, as described on pages 10 and 13-17 of Duquesne Light Statement No. 1.
- h) Explain how Dr. Stanton's recommended "bundled renewables RFP" is consistent with the "all-resource Request for Proposals" that Dr. Stanton characterizes on page 8, lines 10-13 as an "appropriate analysis."

Response:

- a) In the Pennsylvania context, a bundled renewables RFP refers to an RFP that accepts offers that include both AECs and energy.
- b) Dr. Stanton's testimony does not discuss these attributes.
- c) Dr. Stanton's testimony does not discuss these terms.
- d) Dr. Stanton's testimony does not discuss these potential limitations.
- e) Dr. Stanton's testimony does not discuss these potential limitations.
- f) Dr. Stanton's testimony does not discuss these potential limitations.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

- g) Dr. Stanton's recommendation suggests a larger number of AECs and MWs.
- h) Duquesne Light requires both AECs and energy. As such, it would issue an RFP for these two attributes, bundled together. There would be no limitations on what types of resources could respond to or be accepted in this RFP process.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-22

Reference page 32, lines 15-17 of Dr. Stanton's direct testimony, where Dr. Stanton states, "...the Commission should require Duquesne to initiate a pilot program amounting to 10 percent or more of its total AECs obligation (or a minimum of 21 MW solar or 12 MW wind renewables contracts)."

- a) Please provide all workpapers, electronic files (with formulas intact), assumptions (with sources cited), and calculations that were utilized in calculating each of the indicated recommended quantities, identified with underline, in Dr. Stanton's recommendation: "a pilot program amounting to **[i] 10 percent or more** of [Duquesne Light's] total AECs obligation (or a minimum or **[ii] 21 MW solar** or **[iii] 12 MW wind** renewables contracts)."
- b) Please provide all support for recommending the specific quantities underlined in (a).

Response:

- a) Workpapers containing calculations and assumptions can be found in Attachment I-22(a).
- b) The recommendation of 10 percent was offered only as a small number greater than zero, suggesting that Duquesne can at the very least try out a long-term renewable contract approach in a pilot (initial and exploratory) program.

Docket No. P-2020-3019522

Duquesne Light Company Interrogatories for MAREC Action
MAREC Action Attachment I-22(a)

Applied Economics Clinic
www.aeclinic.org

Primary Contact: Elizabeth A. Stanton, PhD
liz.stanton@aeclinic.org



Applied Economics Clinic
Economic and Policy Analysis of Energy, Environment and Equity

Last Updated: July 31, 2020

Table of Contents

Tab Name	Description
Pilot Program Calculations	Calculations associated with pilot program sizes (Solar and Wind)
Library	Underlying assumptions and data

Exhibit SGF-1 R

Duquesne Light Company	Capacity (MW)	Generation (GWh)	Percent of Tier I AEC Obligation
Tier I AEC Requirement (8% of Total Load)	N/A	587	100%
Proposed Solar PPA	7	20	3%
Potential Pilot Program (Solar contracts)	21	59	10%
Potential Pilot Program (Wind contracts)	12	59	10%

Exhibit SGF-1 R

Reference Table 1: AEC Assumptions

AEPS 2021 target for Tier I energy sources	8%	Source: Pennsylvania Public Utility Commission, Pennsylvania Alternative Credit Program. Available at: https://www.pennacps.com/aboutacps/
AEPS 2021 target for Tier II energy sources	10%	Source: Pennsylvania Public Utility Commission, Pennsylvania Alternative Credit Program. Available at: https://www.pennacps.com/aboutacps/
Duquesne Light's Proposed Solar PPA (MW)	7	Source: Direct Testimony of C. James Davis, Docket No. P-2020-3019522.
Pilot Program Size (% of total AEC obligation)	10%	AEC Assumption

Reference Table 2: Duquesne Light Company's Total Retail Sales

Source: Ogden, D.B. April 20, 2020. Direct Testimony of David B. Ogden, Exhibit DBO-4. Testimony before the Pennsylvania Public Utility Commission on behalf of Duquesne Light Company, Docket No. P-2020-3019522. Available at: http://www.puc.pa.gov/about_puc/consolidated_case_view.aspx?Docket=P-2020-3019522

	2016	2017	2018	2019
Residential and Lighting Load (kWh)	4,540,667	4,211,856	4,660,442	4,499,025
Small Commercial and Industrial Load (MWh)	731,188	680,324	769,058	887,436
Medium Commercial and Industrial Load (MWh)	2,702,271	2,693,593	2,703,106	2,045,958
Total Load (MWh)	7,974,126	7,585,813	8,072,606	7,342,439

Reference Table 3: Lazard Capacity Factors

Source: LAZARD, November 2019. *Levelized Cost of Energy Analysis 13.0*, pp. 16-17. Available at: <https://www.lazard.com/perspective/coe2019>

Technology	Capacity Factor
Solar PV (Utility Scale—Crystalline)	32%
Wind—On Shore	55%

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-23

Reference page 32, line 17, to page 33, line 2, of Dr. Stanton's direct testimony, where Dr. Stanton states, "For optimal results for ratepayers, the Commission should direct the Company to work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables."

- a) Describe in detail the process to "work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables."
- b) Did Dr. Stanton estimate the time required to implement the process to "work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables?" If so, how long would this require?
- c) Did Dr. Stanton estimate the cost of the process to "work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables?" If so, provide any cost estimates and any support for those cost estimates.
- d) Under Dr. Stanton's recommendation, who would pay for the costs of the process to "work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables?" How would the recovery of such costs be allocated?

Response:

- a) Dr. Stanton's testimony does not provide instructions on how to design a stakeholder process. For information on this subject please see RAP's June 2013 Report.⁹
- b) Dr. Stanton's testimony does not address the design of a stakeholder process.
- c) Dr. Stanton's testimony does not address the costs of a stakeholder process.
- d) Dr. Stanton's testimony does not address the allocation of these costs.

⁹ Wilson, R. et al. June 2013. "Best Practices in Electric Utility Integrated Resource Planning." *Prepared for the Regulatory Assistance Project*. Available at: <https://www.raonline.org/wp-content/uploads/2016/05/rapsynapse-wilsonbiewald-bestpracticesinirp-2013-jun-21.pdf>.

Exhibit SGF- 2R

Exhibit SGF-2R

Duquesne Light Company

Correction in MAREC Actions' Calculation of Rate of Decrease in Reported Wind Capital Costs to Be Expressed in Nominal Dollars

'MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx' Values Before Correction

		Low	High	Source
[1]	2016 Wind Capital Cost (\$/kW), 2016\$	1,250	1,700	'[MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Library!\$X\$12:\$Y\$12
[2]	2016 CPI-U Value	240.007	240.007	'[MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Historical CPI-U (1968-2019)!\$E\$55
[3]	2019 CPI-U Value	255.657	255.657	'[MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Historical CPI-U (1968-2019)!\$E\$58
[4]=[3]/[2]	2019/2016 CPI-U Factor	1.065	1.065	
[5]=[1]x[4]	2016 Wind Capital Cost (\$/kW), 2019\$	1,332	1,811	
[6]	2019 Wind Capital Cost (\$/kW), 2019\$	1,100	1,500	'[MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Library!\$R\$31:\$S\$31
[7]=([6]/[5])^(1/3)-1	2016-2019 Annual Change in Cost	-6%	-6%	See '[MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Wind Cost Comparison!\$J\$7:\$K\$7

'MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx' Values After Correction (Change Expressed in Nominal Dollars)

		Low	High
[8]=[1]	2016 Wind Capital Cost (\$/kW), 2016\$	1,250	1,700
[9]=[6]	2019 Wind Capital Cost (\$/kW), 2019\$	1,100	1,500
[10]=([9]/[8])^(1/3)-1	2016-2019 Annual Change in Cost	-4%	-4%

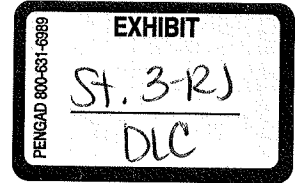
Exhibit SGF- 3R

Duquesne Light Company
 Calculation of Total Residential EGS Charges over Default Service in Percentage Terms (Based on CAUSE-PA Exhibit 1)
 Values from CAUSE-PA Exhibit 1

Month	Residential					
	[1] Average EGS (\$/kWh)	[2] Average Default Service (\$/kWh)	[3] EGS Load (kWh)	[4] = ([1] - [2]) x [3] Total EGS Charges over Default Service (\$)	[5] = [2] x [3] Total Charges If EGS Load on Default Service (\$)	
Jan-17	0.0914	0.0766	120,588,155	1,780,822.42	9,240,326.83	
Feb-17	0.0921	0.0766	103,134,132	1,597,571.09	7,897,188.72	
Mar-17	0.0921	0.0768	93,792,921	1,430,364.89	7,203,676.37	
Apr-17	0.0924	0.0768	87,299,261	1,359,280.78	6,707,282.78	
May-17	0.0933	0.0773	80,135,904	1,276,373.90	6,198,108.22	
Jun-17	0.0937	0.0774	98,388,546	1,602,427.25	7,614,223.16	
Jul-17	0.0947	0.0775	133,507,232	2,287,416.56	10,349,723.00	
Aug-17	0.0953	0.0782	139,161,836	2,390,721.66	10,876,714.90	
Sep-17	0.0959	0.0775	108,206,087	1,993,101.10	8,383,198.69	
Oct-17	0.0967	0.0778	97,159,120	1,831,829.57	7,561,100.25	
Nov-17	0.0970	0.0772	84,742,093	1,677,478.75	6,545,848.53	
Dec-17	0.0978	0.0770	101,203,185	2,105,667.56	7,796,218.12	
Jan-18	0.0972	0.0770	135,146,552	2,729,889.90	10,411,992.02	
Feb-18	0.0985	0.0775	108,244,386	2,273,884.81	8,393,466.80	
Mar-18	0.0986	0.0773	92,958,535	1,978,133.39	7,189,114.97	
Apr-18	0.0957	0.0773	94,014,658	1,730,519.60	7,266,271.85	
May-18	0.0992	0.0776	81,694,100	1,768,181.41	6,339,568.64	
Jun-18	0.1002	0.0783	115,969,709	2,543,532.52	9,081,646.11	
Jul-18	0.1003	0.0790	145,595,505	3,092,591.23	11,504,642.41	
Aug-18	0.1000	0.0790	145,479,629	3,046,362.82	11,498,849.30	
Sep-18	0.0988	0.0791	144,104,990	2,838,073.65	11,395,120.28	
Oct-18	0.0998	0.0774	102,756,638	2,306,685.97	7,952,834.25	
Nov-18	0.1010	0.0740	89,944,966	2,425,361.71	6,657,093.19	
Dec-18	0.1009	0.0734	104,164,351	2,866,818.17	7,641,572.91	
Jan-19	0.1032	0.0730	112,617,393	3,403,135.21	8,217,611.69	
Feb-19	0.1038	0.0727	111,704,900	3,470,867.47	8,122,517.52	
Mar-19	0.1047	0.0728	97,223,088	3,102,751.15	7,075,250.29	
Apr-19	0.1053	0.0728	80,440,515	2,608,091.69	5,858,496.66	
May-19	0.1061	0.0737	74,513,398	2,413,538.00	5,493,577.50	
Jun-19	0.1054	0.0736	91,353,607	2,900,714.13	6,726,095.95	
Jul-19	0.1041	0.0736	130,542,289	3,984,537.70	9,607,167.24	
Aug-19	0.1032	0.0736	145,429,776	4,296,880.02	10,707,258.02	
Sep-19	0.1022	0.0736	116,892,397	3,335,796.02	8,606,769.17	
Oct-19	0.1023	0.0735	92,948,949	2,674,469.32	6,834,860.55	
Nov-19	0.1035	0.0732	75,383,236	2,287,982.11	5,517,931.06	
Dec-19	0.1036	0.0718	93,006,825	2,958,691.01	6,673,539.12	
Jan-20	0.1023	0.0698	101,925,422	3,312,441.92	7,116,696.93	
Feb-20	0.1026	0.0696	90,267,394	2,978,409.42	6,281,715.73	
Mar-20	0.1032	0.0697	84,539,358	2,835,720.33	5,892,939.93	
Apr-20	0.1034	0.0699	83,018,744	2,781,447.34	5,806,735.41	
May-20	0.1033	0.0700	77,870,542	2,590,953.42	5,453,629.56	
			[4]	[5]	[6]=[4]/[5]	
			Total EGS Charges over Default Service	Total Charges If EGS Load on Default Service	Total EGS Charges over Default Service	
			(\$)	(\$)	(%)	
			Jan-17 through May-20	102,869,316.96	321,698,574.64	32%
			Jan-19 through May-20	51,936,426.25	119,992,792.34	43%

DUQUESNE LIGHT STATEMENT NO. 3-RJ

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**



**Petition Of Duquesne Light Company :
For Approval Of Default Service Plan :
For The Period June 1, 2021 Through :
May 31, 2025 :**

Docket No. P-2020-3019522

**REJOINDER TESTIMONY OF
SCOTT G. FISHER**

Dated: September 4, 2020

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II.	Response to MAREC Action Witness Stanton.....	1

1 **I. Introduction**

2 **Q. Are you the same Scott G. Fisher who sponsored direct and rebuttal testimony in this**
3 **proceeding?**

4 A. Yes, I submitted direct testimony on April 20, 2020, that is marked as Duquesne Light
5 Statement No. 3, and I also submitted rebuttal testimony on August 14, 2020, that is marked
6 as Duquesne Light Statement No. 3-R.

7
8 **Q. What is the purpose of your rejoinder testimony?**

9 A. The purpose of my rejoinder testimony is to respond to claims made and information
10 provided by MAREC Action (“MAREC”) witness Elizabeth Stanton in her surrebuttal
11 testimony. While I may not address every argument made by Dr. Stanton (or any other
12 witness) in this testimony, my decision not to address any given argument should not be
13 interpreted as agreement with any such argument. In some cases, I addressed such
14 arguments in my rebuttal testimony.

15
16 **II. Response to MAREC Action Witness Stanton**

17 **Q. On page 4 of her surrebuttal testimony, Dr. Stanton asserts that Duquesne Light**
18 **should conduct what she refers to as an “all-resource RFP” because she claims that**
19 **this “will reveal the optimal amount of long-term renewables to contract for.” How**
20 **do you respond?**

1 A. Dr. Stanton provided no support for her claim that the optimal quantity (and potentially
2 type) of long-term renewable generation contracts to include in Duquesne Light's default
3 service supply mix would somehow reveal itself by conducting an "all-resource RFP," or
4 how conducting such an RFP would show that Duquesne Light's specific proposal to
5 conduct a competitive solicitation for a long-term contract for utility-scale solar generation
6 is in any way inconsistent with the prudent mix requirement of Act 129.¹ Based on what
7 little description Dr. Stanton provided of her "all-resource RFP" proposal, I understand that
8 she recommends that bids for both energy and alternative energy credits ("AECs") be
9 requested, with no limits regarding the quantities requested, and then hoping that the
10 prudent mix of contracts to accept will become clear from a look at the bid prices for
11 whatever different resources and contract terms bidders decide to offer.² However, in
12 contending that a look at the resultant bid prices would somehow reveal the optimal mix,
13 she failed to recognize that the determination of a prudent mix of products in a default
14 service supply portfolio involves multiple considerations beyond just the prices that are bid
15 for individual products in any single solicitation. For example, in my direct testimony I
16 discuss customer benefits that pertain to both the type of supply product and how the
17 products in a default service supply portfolio fit together,³ and in my rebuttal testimony I
18 discuss considerations that must be balanced when including long-term contracts in a
19 default service supply portfolio.⁴ The need to consider these types of factors may be one of
20 the reasons why an approach along the lines of Dr. Stanton's recommendation has (to my

¹ 66 Pa. C.S. § 2807(e)(3.4).

² Surrebuttal Testimony of Elizabeth A. Stanton, p. 4.

³ Duquesne Light Statement No. 3, pp. 4, 7-8, 12-13.

⁴ Duquesne Light Statement No. 3-R, pp. 12-14.

1 knowledge) never been required by the Commission for approval of any utility's default
2 service plan.

3 Dr. Stanton's recommendation is also excessively vague, lacking the necessary
4 specificity for it to be actionable or to address issues that it may entail. In fact, prior to her
5 surrebuttal testimony, Dr. Stanton dedicated only one sentence of testimony to her concept
6 of an "all-resource RFP," in which she simply stated that conducting an "all-resource RFP"
7 followed by "Integrated Resource Modelling" would determine a prudent mix of contracts.⁵
8 When asked during the discovery process to describe her "all-resource RFP" and
9 "Integrated Resource Modelling" recommendations, Dr. Stanton repeatedly responded that
10 her testimony does not provide any such instructions regarding these recommendations.⁶
11 Her surrebuttal testimony similarly is severely lacking in sufficient detail.

12
13 **Q. On page 5 of her surrebuttal testimony, Dr. Stanton suggests as a fallback proposal**
14 **that "the Commission provide a minimum percentage threshold for long-term**
15 **renewables contracts as a share of default service that it finds consistent with its**
16 **requirement that EDCs show how their DSP proposals provide a prudent mix of**
17 **supply resources." How do you respond?**

18 **A.** In its Second Default Service Rulemaking Order, the Commission provided guidance
19 regarding interpretation of the terms "least cost" and "prudent mix." The Commission's
20 guidance included the following:

⁵ Direct Testimony of Elizabeth A. Stanton, p. 8.

⁶ Duquesne Light Statement No. 3-R, Exhibit SGF-1R. See especially MAREC's responses to DLC Set I-3, DLC Set I-4, DLC Set I-5, and DLC Set I-6.

1 We agree with the majority of parties that the “prudent mix” of contracts
2 be interpreted in a flexible fashion which allows the DSPs to design their
3 own combination of products that meets the various obligations to achieve
4 “least cost to customers over time,” ensure price stability, and maintain
5 adequate and reliable service.⁷

6 We do reject the positions of those parties that “prudent mix” be defined
7 to always require a specific mix or percentage of types of contract
8 components in each default service plan or a minimum of two types of
9 products.⁸

10 A. In other words, the Commission’s guidance is that flexibility is a valuable aspect in
11 satisfying the requirements of Act 129, and no minimum quantity of long-term contracts is
12 stipulated. This guidance is consistent with the Commission’s approval of Duquesne
13 Light’s prior default service plans that have not included any long-term contracts.

14
15 **Q. On pages 6-7 of her surrebuttal testimony, Dr. Stanton responds to your identification**
16 **of fundamental flaws in the study that she performed three years ago and that she**
17 **presented in this proceeding to support her recommendations regarding the long-**
18 **term contracting of renewable generation resources. How do you respond?**

19 A. Dr. Stanton did not specifically address any of the individual fundamental flaws that I
20 identified in her 2017 study.⁹ Instead she just recharacterized her study as “a simple,
21 illustrative comparison of long-term renewable PPAs versus default supply,” and she
22 referred generally to the fundamental flaws in her study that were uncovered as “complex

⁷ *Default Service and Retail Electric Markets*, Docket No. L-2009-2095604 (Order entered October 4, 2011) (“*Second Default Service Rulemaking Order*”), p. 60.

⁸ *Second Default Service Rulemaking Order*, p. 60.

⁹ Duquesne Light Statement No. 3-R, pp. 18-24.

1 nuances.”¹⁰ Regardless of how Dr. Stanton would like to characterize her study’s
2 fundamental flaws, these flaws are not nuances, but instead they illuminate the fact that her
3 study is a clear comparison of apples and oranges without a recognition of the difference,¹¹
4 and that her study also contains questionable underlying assumptions that she has applied
5 years into the future to support her contentions about the comparative economics of long-
6 term renewable generation contracts,¹² many of which Dr. Stanton was unable or unwilling
7 to reveal when asked during the discovery process.¹³ As a result, this study should not be
8 relied upon to formulate policy involving long-term financial commitments.

9
10 **Q. On pages 8-10 of her surrebuttal testimony, Dr. Stanton adds to the examples that she**
11 **presented in her direct testimony of places where long-term renewable generation**
12 **contracts have been either engaged in or considered, and in which the local utility**
13 **may or may not be a counterparty. How do you respond?**

14 **A. Neither the examples that Dr. Stanton presented in her direct testimony, nor those that she**
15 **presented in her surrebuttal testimony, justify doing something different from what**

¹⁰ Surrebuttal Testimony of Elizabeth A. Stanton, p. 6.

¹¹ In my rebuttal testimony, I explained that Dr. Stanton entirely overlooked the significant differences between full requirements default service supply products and the output of renewable generation facilities when she compared her assumed costs of each. (Duquesne Light Statement No. 3-R, pp. 18-21.) I also explained that Dr. Stanton inappropriately included the cost of Network Integration Transmission Service (“NITS”) in her estimated prices for full requirements default service supply products. (Duquesne Light Statement No. 3-R, pp. 20, 23-24.)

¹² For example, in my rebuttal testimony I explained that, contrary to Dr. Stanton’s suggestion, the \$20 per megawatt-hour adder that Dr. Stanton assumed to estimate the costs of various components of full requirements default service products is not a part of any bidding rules for Duquesne Light’s default service supply products. In fact, it is only a placeholder value that is applied to only 5% of the supply of only some supply products solicited in another utility’s service area, and the bidders in those solicitations may modulate their bid prices if they believe that this placeholder value is too low or too high. (Duquesne Light Statement No. 3-R, pp. 21-23.)

¹³ Duquesne Light Statement No. 3-R, pp. 25-26, Exhibit SGF-1R. See especially MAREC’s responses to DLC Set I-12, DLC Set I-14, DLC Set I-15, DLC Set I-16, and DLC Set I-18.

1 Duquesne Light is proposing. In fact, if the Commission approves Duquesne Light's
2 proposal to conduct a competitive solicitation for a long-term contract for utility-scale solar
3 generation, Dr. Stanton could include the approval of Duquesne Light's plan with her other
4 examples.

5

6 **Q. Does this conclude your rejoinder testimony?**

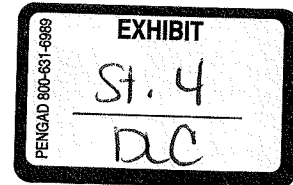
7 A. Yes, at this time.

DUQUESNE LIGHT STATEMENT NO. 4

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition Of Duquesne Light Company :
For Approval Of Default Service Plan : **Docket No. P-2020_____**
For The Period June 1, 2021 Through :
May 31, 2025 :

**DIRECT TESTIMONY OF
DAVID B. OGDEN**



Dated: April 20, 2020

1 **I. INTRODUCTION**

2 **Q. Please state your full name, business affiliation and address.**

3 A. My name is David B. Ogden. I am the Manager of Rates and Tariff Services for Duquesne
4 Light Company (“Duquesne Light” or “Company”). My business address is 411 7th
5 Avenue, Pittsburgh, PA, 15219.

6
7 **Q. Please describe your professional and educational background.**

8 A. I received a Bachelor of Science in Business Administration Degree with a major in
9 Accounting from Clarion University of Pennsylvania in 2001. I am a Certified Public
10 Accountant. I began my career at the Company in 2008 as the Supervisor of Derivative
11 Accounting and Special Projects. Over the last twelve years, I have held supervisory and
12 managerial positions within Accounting, Financial Planning and Analysis and currently the
13 Rates Department. Prior to joining Duquesne Light, I was a senior audit associate in the
14 Pittsburgh office of PricewaterhouseCoopers LLP, a public accounting firm, where I
15 performed attestation, advisory and compliance services for clients throughout the United
16 States. Prior to joining PricewaterhouseCoopers, I held audit positions within the
17 Allegheny County Controllers Office.

18
19 **Q. Please describe your current responsibilities.**

20 A. In my current role as Manager of Rates and Tariff Services, I am responsible for overseeing
21 the Company’s retail rates and wholesale transmission rates. In addition, it is my
22 responsibility to ensure the rates are properly distributed to Customer Billing.

23

24

1 **Q. Have you previously testified before the Pennsylvania Public Utility Commission?**

2 A. Yes. I have testified in the Company's Default Service Plan ("DSP VIII") at Docket No.
3 P-2016-2543140, the Company's Distribution System Improvement Charge ("DSIC")
4 proceeding at Docket No. P-2016-2540046, and the Company's 2018 base rate proceeding
5 at Docket R-2018-3000124.

6

7 **Q. What is the purpose of your Direct Testimony?**

8 A. The purpose of my testimony is to address the following items regarding the Company's
9 proposed ninth default service plan ("DSP IX"):

- 10 1. Describe the proposed default service supply rates for Residential and Lighting, Small
11 Commercial and Industrial ("C&I"), Medium C&I, and Large C&I customers
12 obtained through competitive auctions.
- 13 2. Describe the default service supply rates for the Company's proposed Electric Vehicle
14 Time-of-Use ("EV-TOU") Pilot Program.
- 15 3. Describe the Company's default service costs and cost recovery.
- 16 4. Describe the Company's plan to recover retail competition costs.
- 17 5. Describe the reconciliation process for Rider No. 8 - Default Service Supply ("DSS")
18 rates and Rider No. 9 – Day-Ahead Hourly Price Service ("HPS") rates.
- 19 6. Describe the Company's proposed recovery of its Rider No. 21 – Net Metering Service
20 ("Net Metering") banked kWh cash payout for default service customers.
- 21 7. Describe the Company's reconciliation periods and when it posts the Price to Compare
22 ("PTC").

1 8. Describe the proposed changes to the Company’s Retail Tariff necessary to implement
2 DSP IX.

3 9. Describe the proposed changes to the Company’s Electric Generation Supplier
4 (“EGS”) Coordination Tariff necessary to implement DSP IX.

5

6 **Q. Are you sponsoring any exhibits as part of your Direct Testimony?**

7 A. Yes. I am sponsoring the following exhibits:

8 • Exhibit DBO-1 Illustrative Example to Calculate DSS Rates for Residential and
9 Lighting Customers

10 • Exhibit DBO-2 Derivation of DSS Rate Factors for Residential and Lighting
11 Customers

12 • Exhibit DBO-3 Illustrative Example to Calculate EV-TOU DSS Rates

13 • Exhibit DBO-4 Derivation of EV-TOU DSS Rate Factors

14 • Exhibit DBO-5 Estimated Default Service Plan Related Costs

15 • Exhibit DBO-6 Illustrative Example of a 1307e Reconciliation for Residential and
16 Lighting Customers

17 • Exhibit DBO-7 Proposed Retail Tariff Supplement (clean version)

18 • Exhibit DBO-8 Proposed Retail Tariff Supplement (red-line version)

19 • Exhibit DBO-9 Proposed EGS Tariff Supplement (clean version)

20 • Exhibit DBO-10 Proposed EGS Tariff Supplement (red-line version)

21

22 **Q. Were these exhibits prepared by you or under your supervision?**

23 A. Yes. These exhibits were prepared either by me or under my supervision. They were
24 prepared, to the best of my knowledge, in accordance with the Pennsylvania Public Utility
25 Commission (“Commission”) requirements and practice.

1 **Q. How is your testimony organized?**

2 A. I first discuss the proposed DSS rates for the various customer classes. I then describe the
3 rate design for the Company's proposed EV-TOU Pilot Program. Next, I describe the
4 proposed method to recover the costs associated with implementing the DSP IX plan and
5 of administering certain retail competition programs and initiatives. Next, I describe the
6 proposed method to recover the cash payout associated with Net Metering. I then describe
7 the DSS reconciliation and PTC posting processes. Finally, I describe the proposed
8 changes to the Company's Retail and EGS Coordination Tariffs necessary to implement
9 the proposed default service plan.

10

11 **II. RIDER NO. 8 – DEFAULT SERVICE SUPPLY (“DSS”) RATES FOR**
12 **RESIDENTIAL AND LIGHTING CUSTOMERS**

13

14 **Q. What rate schedules apply to Residential and Lighting customers?**

15 A. Residential customers are served under rate schedules RS, RH and RA. Lighting customers
16 are served under rate schedules AL, SE, SM, SH, and PAL.

17

18 **Q. Please describe the current DSS rates applicable to Residential and Lighting**
19 **customers.**

20 A. The current DSS rates for these rate schedules are designed to recover the costs of electric
21 supply that are procured through a competitive auctions solicitation process approved in
22 the Company's DSP VIII proceeding at Docket No. P-2016-2543140 and described in
23 Rider No. 8 – DSS of the Company's current retail Tariff No. 25. The competitive auctions
24 are for full requirements service that includes both the Residential and Lighting load. Full

1 requirements service includes the cost of energy, capacity, congestion and congestion
2 management charges, alternative energy requirements, ancillary services, and PJM grid
3 management charges. DSS rates for Residential and Lighting rate schedules AL and SE
4 are a reconcilable, flat supply charge per kilowatt-hour (“kWh”). DSS rates for Lighting
5 rate schedules SM, SH and PAL are a fixed rate per fixture based on the monthly kWh
6 consumption of the fixture and are also reconcilable.

7
8 **Q. Is the Company proposing any changes to the basic process of determining DSS rates**
9 **for Residential and Lighting customers in DSP IX?**

10 A. No. As discussed by Duquesne Light witness Mr. Peoples, the Company is proposing to
11 continue to obtain DSS through multiple competitive auctions, and the Company will use
12 the same basic process to calculate the new supply rates. Under the current and proposed
13 plan, new supply rates will continue to be effective every June 1 and December 1 for the
14 period June 1, 2021 through May 31, 2025.¹

15
16 **Q. In DSP IX, please describe how the Residential and Lighting DSS rates will be**
17 **determined.**

18 A. Winning bids will be determined through the competitive auction process as described by
19 Duquesne Light witness Mr. Peoples. In general, a single weighted-average price will be

¹ In response to the Commission’s January 23, 2020 Secretarial Letter, Duquesne Light witness Fisher provides a statistical summary of Duquesne Light’s PTC changes over the past ten years and assesses the benefits of a 6-month PTC change compared to a 3-month PTC change.

1 calculated from the winning bids necessary to fill the applicable tranches in accordance
2 with the guidelines of the competitive auction process.

3 The Company will then adjust the weighted-average winning bid price to recover
4 the cost of line losses, initial and ongoing administrative costs to provide default service,
5 the cost of solar contracts (if any) obtained by the Company on behalf of Residential and
6 Lighting default service customers,² and prior period over/under collections³ with interest.
7 Once the gross weighted average of the winning bid price is determined, the Company will
8 adjust the price using class rate factors to derive Residential and Lighting class rates based
9 on their respective energy consumption patterns and capacity requirements. Next, the
10 Company will adjust the individual class rates for any costs that are directly related to either
11 the Residential or Lighting class. The final step will adjust the price to recover
12 Pennsylvania gross receipts tax (“GRT”). This process is generally the same as that used
13 by the Company in DSP VIII.

14
15 **Q. Have you prepared an exhibit that shows the derivation of DSS rates for Residential**
16 **and Lighting customers?**

17 **A.** Yes. Exhibit DBO-1 is an illustrative example showing the derivation of the Residential
18 and Lighting DSS rates for the DSP IX period.

19

² Initially, the same basic process that exists today will be used to develop Residential and Lighting DSS rates. The rates will be adjusted for those costs associated with the Company’s long-term solar contracts, if any, during the DSP IX period that are approved by the Pennsylvania Public Utility Commission. Duquesne Light witness Mr. Davis discusses the Company’s plan to evaluate entering into long-term solar contracts during the DSP IX period.

³ Including the proposed recovery of net metering compensation as described in Section VI.

1 **Q. Have you updated the rate factors used to derive the DSS rates for Residential and**
2 **Lighting customers?**

3 A. Yes. Exhibit DBO-2 shows the derivation of the rate factors that the Company proposes
4 to use for the 2021-2022 effective rate period. As shown in Exhibit DBO-2, capacity prices
5 per MWh were determined based on the results of the 2021-2022 PJM capacity auction,
6 and on historical customer class capacity obligations and loads.⁴ Hourly load-weighted
7 locational marginal prices (“LMPs”) for energy were calculated based on hourly market
8 price and load data from 2016 through 2019. The load-weighted average LMPs for
9 Lighting customers reflect the off-peak nature of these customers’ load. Rate factors were
10 derived by adding capacity prices and LMPs per MWh, and expressing these values relative
11 to the load-weighted average sum of capacity prices and LMPs per MWh for the
12 Residential and Lighting customer load combined.

13
14 **III. RIDER NO. 8 – DEFAULT SERVICE SUPPLY (“DSS”) RATES FOR SMALL**
15 **C&I CUSTOMERS**

16
17 **Q. What rate schedules apply to Small C&I customers?**

18 A. Small C&I customers are those customers with monthly metered demand less than 25 kW
19 served under rate schedules GS/GM and GMH and unmetered customers served under rate
20 schedule Unmetered Service (“UMS”).⁵

21

⁴ Due to ongoing changes in PJM capacity rules and delays in the capacity auction process, capacity auction prices have not yet been established for the 2022-2023 capacity planning period and beyond. The Company proposes to update the rate factors using the same basic methodology shown in Exhibit DBO-1 and DBO-2 as future base capacity auction prices are published.

⁵ Municipal traffic signals are an example of UMS customers.

1 **Q. Please describe how the current DSS rates for Small C&I customers were developed.**

2 A. DSS is procured through a competitive auction solicitation process approved in the
3 Company's DSP VIII proceeding and described in Rider No. 8 – DSS of the Company's
4 current retail Tariff No. 25. The competitive auction is for full requirements service. Small
5 C&I DSS rates are reconcilable, flat supply charges per kWh.

6
7 **Q. Is Duquesne Light proposing any changes to the basic process of determining DSS
8 rates for Small C&I customers in DSP IX?**

9 A. No. The process for determining DSS rates for Small C&I customers is generally the same
10 as in DSP VIII. As discussed by Duquesne Light witness Mr. Peoples, the Company is
11 proposing to continue to obtain DSS through multiple competitive auctions, and the
12 Company will use the same basic process to calculate the retail rate. Under the current and
13 proposed plan, new DSS rates will continue to be effective every June 1 and December 1
14 for the period June 1, 2021 through May 31, 2025.

15
16 **Q. Please describe how the DSS rates will be determined for rate schedules GS/GM,
17 GMH and UMS.**

18 A. A single weighted-average price will be calculated from the winning bids necessary to fill
19 the applicable tranches in accordance with the guidelines of the competitive auction
20 process. Similar to the derivation of the Residential and Lighting DSS rates shown in
21 Exhibit DBO-1, the Company proposes to adjust the weighted-average winning bid price
22 to recover the cost of line losses, initial and ongoing administrative costs to provide default
23 service, the cost of solar contracts (if any) obtained by the Company on behalf of Small

1 C&I default service customers, and prior period over/under collections with interest.⁶ Once
2 the gross weighted-average of the winning bid price is determined, the Company will adjust
3 the rate for any costs that are directly related to the Small C&I class. The final step will
4 adjust the price to recover Pennsylvania gross receipts tax (“GRT”). This process is
5 generally the same as that used by the Company in DSP VIII.
6

7 **IV. RIDER NO. 8 – DEFAULT SERVICE SUPPLY (“DSS”) RATES FOR MEDIUM**
8 **C&I CUSTOMERS**

9
10 **Q. What rate schedules apply to Medium C&I customers?**

11 A. Medium C&I customers are those customers served under rate schedules GS/GM and
12 GMH with monthly metered demand that is at least 25 kW. For purposes of Rider No. 8 –
13 DSS, medium customers are those customers with a monthly metered demand that is at
14 least 25 kW and less than 200kW, on average, in a twelve (12) month period.⁷
15

16 **Q. How are C&I customers assigned to Rider No. 8 – DSS or Rider No. 9 – HPS?**

17 A. For purposes of assigning customers not being served by an EGS to the applicable supply
18 rate, the Company evaluates the customer’s twelve (12) most recent months of monthly
19 billing demand available in October of the preceding year. If the customer’s average
20 monthly billing demand is greater than or equal to 25 kW but less than 200 kW in the
21 twelve (12) month period, then that customer is assigned to the Rider No. 8 – DSS rate for

⁶ Including the proposed recovery of net metering compensation as described in Section VI.

⁷ For purposes of assigning customers to the applicable supply rate, each October, Duquesne Light shall evaluate the customer’s average monthly usage and billing demand for the past twelve (12) most recent months.

1 Medium C&I customers effective with the customer's June billing.⁸ If the customer's
2 average monthly billing demand is greater than or equal to 200 kW, the customer will be
3 assigned to Rider No. 9 – HPS effective June 1st. Customers served on Rider No. 9 are
4 described further in Section V.

5
6 **Q. Please describe how the current Rider No. 8 - DSS rates for Medium C&I customers**
7 **were developed.**

8 A. DSS is procured through a competitive auction solicitation process approved in the
9 Company's DSP VIII proceeding and described in Rider No. 8 – DSS of the Company's
10 current retail Tariff No. 25. The competitive auction is for full requirements service.
11 Medium C&I DSS rates are reconcilable, flat supply charges per kWh.

12
13 **Q. Is Duquesne Light proposing any changes to the basic process of determining DSS**
14 **rates for Medium C&I customers in DSP IX?**

15 A. No. As discussed by Duquesne Light witness Mr. Peoples, the Company is proposing to
16 continue to obtain DSS through multiple competitive auctions for full requirements supply
17 products, and the Company will use the same basic process to calculate the DSS rate.
18 Under the proposed plan, through May 31, 2025, new DSS rates will continue to become
19 effective every June 1, September 1, December 1, and March 1 for Medium C&I customers
20 served under Rider No. 8.

21

⁸ Duquesne Light lowered the upper threshold for the Medium C&I class from < 300 kW to < 200 kW on June 1, 2019.

1 **Q. Please describe how the Rider No. 8 -DSS rates will be determined for rate schedules**
2 **GS/GM and GMH.**

3 A. The Company proposes to continue the same basic process used to derive DSS rates. A
4 single weighted-average price will be calculated from the winning bids necessary to fill the
5 applicable tranches in accordance with the guidelines of the competitive auction process.
6 Similar to the derivation of the Residential and Lighting rates shown in Exhibit DBO-1,
7 the Company proposes to adjust the weighted-average winning bid price to recover the cost
8 of line losses, initial and ongoing administrative costs to provide default service, the cost
9 of solar contracts (if any) obtained by the Company on behalf of Medium C&I default
10 service customers, and prior period over/under collections with interest.⁹ Once the gross
11 weighted average of the winning bid price is determined, the Company will adjust the rate
12 for any costs that are directly related to the Medium C&I class. The final step will adjust
13 the price to recover Pennsylvania gross receipts tax (“GRT”). This process is generally the
14 same as that used by the Company in DSP VIII.

15
16 **V. RIDER NO. 9 – DAY-AHEAD HPS SUPPLY RATES FOR MEDIUM AND LARGE**
17 **C&I CUSTOMERS**

18
19 **Q. What rate schedules are eligible for Rider No. 9 – Day-Ahead HPS?**

20 A. HPS default service applies to customers served under rate schedules GS/GM and GMH
21 with monthly metered demand that is greater than or equal to 200 kW on average, in a
22 twelve (12) month period, as well as Large C&I customers served under rate schedules GL,
23 GLH, L, and HVPS.

⁹ Including the proposed recovery of net metering compensation as described in Section VI.

1

2 **Q. Please describe how HPS rates are developed in DSP VIII.**

3 A. The formula used to calculate HPS rates is provided in Rider No. 9 – Day-Ahead HPS.
4 The Company procures full requirements supply for HPS through a competitive auction
5 solicitation process. As described by Duquesne Light witness Mr. Peoples, the Company
6 issues a single solicitation each year, wherein the Company requests competitive offers
7 from suppliers to provide default service supply. The suppliers (or supplier) with the
8 lowest fixed price bids are selected as the winners of the HPS solicitation. In addition to
9 being paid its winning bid price, each winning supplier is paid for its share of the associated
10 energy (at the day-ahead hourly energy market prices), capacity, and ancillary service
11 charges billed to HPS customers, as described in Rider No. 9 – Day-Ahead HPS. The
12 winning suppliers' fixed price bids are designed to recover the alternative energy credit
13 costs, the energy balancing costs associated with day-ahead pricing versus final energy
14 costs, and any other third-party supplier administrative costs of providing HPS. The annual
15 solicitation is conducted in March of each year.

16

17 **Q. Is Duquesne Light proposing any changes to the basic process of determining HPS**
18 **rates in DSP IX?**

19 A. No. The Company is proposing to continue to issue annual competitive auctions and
20 charge each HPS customer based on the winning bid prices and its actual hourly usage at
21 the day-ahead hourly energy prices. This will continue to allow customers to manage their
22 electricity usage and supply costs by providing customers with day-ahead notice of hourly

1 energy prices. The methodology used to calculate the other bill components of the HPS
2 rate will remain the same.

3
4 **Q. Is the Company proposing any changes to the methodology used to determine the
5 Fixed Retail Administrative Charge (“FRA”) in Rider No. 9?**

6 A. No. The Company is proposing to continue to include only the implementation and
7 ongoing annual costs in the price billed to customers in the same manner as previously
8 described for DSS rates in Rider No. 8. Specifically, in the derivation of the rates effective
9 June 1 of each year, the Company will include for recovery through the FRA the annual
10 ongoing costs to provide Rider No. 9 as well as the costs to conduct the competitive auction
11 for Rider No. 9. The Company will continue to adjust the FRA to include the initial and
12 ongoing administrative costs to provide default service, the cost of solar contracts (if any)
13 obtained by the Company on behalf of HPS default service customers, as well as a true-up
14 for the prior period over/under collection of Company costs recovered with interest.¹⁰
15 Consistent with DSP VIII, only the Company expenses to be recovered through the FRA
16 will be included in the Company’s Rider No. 9 – Day-Ahead HPS 1307e reconciliation.

17
18 **VI. ELECTRIC VEHICLE TIME-OF-USE DEFAULT SERVICE SUPPLY RATE**

19
20 **Q. Does the Company currently have in effect any TOU supply rate offering?**

21 A. No. The Company had a TOU-1 and TOU-2 pilot program, but that offering ended
22 September 30, 2012. The Company then proposed a new TOU program in DSP VII, which

¹⁰ Including the proposed recovery of net metering compensation as described in Section VI.

1 became effective June 1, 2016. In this program, an EGS supplied TOU rates and service
2 and customers on TOU service became retail customers of the EGS TOU supplier. This
3 TOU program ended May 31, 2017.
4

5 **Q. In Duquesne Light's service area, are EGSs currently permitted to offer TOU supply**
6 **rates?**

7 A. Yes. The Company currently permits EGSs to offer a TOU product using the Duquesne
8 Light bill-ready billing option. The Company will continue to facilitate the offering of
9 EGS TOU rates in DSP IX.
10

11 **Q. Is the Company proposing any changes related TOU service in this proceeding?**

12 A. Yes, in DSP IX, the Company is proposing a new Electric Vehicle Time-of-Use ("EV-
13 TOU") Pilot Program. Duquesne Light witness Ms. Scholl describes the EV-TOU Pilot
14 Program in more detail.
15

16 **Q. Which customers will be eligible to participate in the EV-TOU Pilot Program?**

17 A. As described by Duquesne Light witness Ms. Scholl, EV-TOU service under the Pilot
18 Program will be offered to Residential, Small C&I, and Medium C&I customers eligible
19 for Rider No. 8 who own or lease a plug-in battery electric vehicle or a plug-in hybrid
20 electric vehicle (collectively "EV") or offer charging infrastructure to employees or
21 visitors. Customers eligible for Rider No. 9 – Day-Ahead HPS will not be eligible for the
22 EV-TOU Pilot Program, and they will not bear any of the costs associated with the

1 program.¹¹ The EV-TOU Pilot Program eligibility requirements are described further by
2 Duquesne Light witness Ms. Scholl.

3
4 **Q. Are customers that participate in the EV-TOU Pilot Program also eligible for net**
5 **metering?**

6 A. Yes. Customers who are eligible for Rider No. 8 – DSS EV-TOU supply rates are also
7 eligible for net metering in accordance with the terms and conditions in Rider No. 21 – Net
8 Metering Service. As described in section XI, the Company is proposing to add billing
9 provisions for EV-TOU customer-generators to describe the billing and cash-out process
10 for EV-TOU customer-generators. The EV-TOU customer-generator will receive a credit
11 for each kilowatt-hour received by the Company up to the total amount of electricity
12 delivered to the Customer during the billing period at the full retail rate consistent with
13 Commission regulations. If an EV-TOU customer-generator supplies more electricity to
14 the Company than the Company delivers to the customer-generator in a given billing
15 period, the Company will maintain an active record of the excess kilowatt hours produced
16 at the customer-generators premise in a “bank”. This bank can be used to credit a future
17 offset in kilowatt hours. If an EV-TOU customer-generator supplies more electricity to
18 the Company than the Company delivers to the customer-generator in a given billing
19 period, the excess kilowatt hours shall be carried forward and credited against the EV-TOU
20 customer generator’s usage in a subsequent billing period at the full retail rate. If, in a
21 subsequent billing period, a customer consumes more electricity than produced, kilowatt-
22 hours will be pulled from the customer’s bank on a first in first out basis. Any excess

¹¹ Unmetered accounts on Rider No. 8 also are not eligible for EV-TOU supply rates.

1 kilowatt hours shall continue to accumulate and credit against usage for the 12 month
2 period ending May 31st. On an annual basis, the Company will compensate the customer-
3 generator for kilowatt-hours remaining in the bank on May 31st, at the applicable PTC at
4 the time the excess kilowatt-hours were banked. The customer-generator is responsible
5 for the customer charge, demand charge and other applicable charges under the applicable
6 Rate Schedule.

7
8 **Q. How will electricity for the EV-TOU Pilot Program be supplied?**

9 A. The EV-TOU service for a given customer class will be supplied via the same fixed price,
10 full requirements (“FPFR”) products that provide default service supply for that customer
11 class. Suppliers will be paid the same price for a megawatt-hour of supply regardless of
12 how much of its supply is for EV-TOU customers.

13
14 **Q. By what time periods will EV-TOU supply rates be differentiated?**

15 A. EV-TOU supply rates will be distinguished by three time periods throughout the year. The
16 Off-Peak Period will consist of all hours every day from 11:00 PM through 6:00 AM. The
17 On-Peak Period will consist of all hours every day from 1:00 PM through 9:00 PM. All
18 other hours will be included in the Shoulder Period. The same On-Peak, Off-Peak, and
19 Shoulder Periods will be applicable to all eligible EV-TOU customers.

20
21 **Q. Would the EV-TOU supply rates apply to all load behind the customer meter or just**
22 **the EV load?**

1 A. During the pilot program, the EV-TOU rates would apply to all load associated with the
2 applicable meter, not just the EV load. This would avoid the need to purchase and install
3 a separate meter.
4

5 **Q. Please explain the rationale for the three EV-TOU time periods (Off-Peak, On-Peak,
6 and Shoulder).**

7 A. The EV-TOU supply rates are designed primarily to help promote the adoption of electric
8 vehicles in the Duquesne Light service area by making it cheaper to charge EVs overnight.
9 The EV-TOU supply rate will promote charging of EVs overnight (i.e., incent customers
10 to add incremental load at lower rates) when demand is relatively low on the system and
11 discourage EV charging during On-Peak Periods when the underlying market costs of
12 electricity are higher. A discounted Off-Peak Period supply rate (from 11:00 PM through
13 6:00 AM) that applies every day of the week also will be simple for customers to
14 understand.
15

16 **Q. How will the EV-TOU supply rates be determined for the Off-Peak Period, On-Peak
17 Period, and the Shoulder Period?**

18 A. For each applicable procurement class, the process will begin with the weighted-average
19 winning bid price for the applicable class's default service supply. The Company will then
20 adjust the weighted-average winning bid price to recover the cost of line losses, initial and
21 ongoing administrative costs to provide default service, the cost of solar contracts (if any)
22 obtained by the Company on behalf of default service customers, and prior period
23 over/under collections with interest. Once the gross weighted average of the winning bid

1 price is determined, the Company will adjust the price using the applicable class rate factors
2 to derive the Off-Peak Period, On-Peak Period, and Shoulder Period rates for that customer
3 class based on its respective energy consumption patterns and capacity requirements.¹²
4 Next, the Company will adjust the individual class rates for other costs related to the
5 applicable customer classes. The final step will adjust the price to recover Pennsylvania
6 gross receipts tax (“GRT”). This process is generally the same as that proposed by the
7 Company for DSP IX and used by the Company in earlier DSPs to establish Residential
8 and Lighting DSS rates based on competitive auction results.

9
10 **Q. Have you prepared an exhibit that shows the derivation of the EV-TOU supply rates?**

11 A. Yes. Exhibit DBO-3 is an illustrative example showing the derivation of the EV-TOU
12 supply rates for the DSP IX period.

13
14 **Q. How did you derive the EV-TOU supply rate factors for the Off-Peak Period, On-
15 Peak Period, and Shoulder Period for each customer class?**

16 A. Exhibit DBO-4 shows the derivation of the EV-TOU supply rate factors that the Company
17 proposes to use for the 2021-2022 effective rate period, for each applicable customer class.
18 As shown in Exhibit DBO-4, capacity prices per MWh were determined based on the
19 results of the 2021-2022 PJM capacity auction, and on historical customer class capacity
20 obligations and loads.¹³ Hourly load-weighted locational marginal prices (“LMPs”) for

¹² Residential and Lighting class rate factors will also be applied at this point, as applicable.

¹³ Due to ongoing changes in PJM capacity rules and delays in the capacity auction process, capacity auction prices have not yet been established for the 2022-2023 capacity planning period and beyond. The Company proposes to update the rate class factors using the same basic methodology shown in Exhibit DBO-3 and DBO-4 as future base capacity auction prices are published.

1 energy were calculated based on hourly market price and load data from 2016 through
2 2019. Rate factors were derived by adding capacity prices and LMPs per MWh for each
3 given time period, and expressing these values relative to the load-weighted average sum
4 of capacity prices and LMPs per MWh across all hours. This process is very similar to the
5 process used to develop the Residential and Lighting supply rate factors that I described
6 earlier in my testimony.

7
8 **Q. Will the new EV-TOU supply rates be reflected in the Company's Retail Tariff?**

9 A. Yes. The Company will reflect the EV-TOU supply rates for each applicable customer
10 class within Rider No. 8 – DSS, as shown in Exhibits DBO-7 and DBO-8 that contain the
11 necessary changes to Rider No. 8 – DSS (both redline and clean versions).

12
13 **Q. Under the Company's plan to have default service providers supply customers under
14 the EV-TOU Pilot Program, will the Company perform any reconciliation of revenues
15 collected from EV-TOU customers with the associated supply costs?**

16 A. Yes. The FPFR suppliers will be paid the same price per megawatt-hour of supply
17 regardless of how much of its supply is for EV-TOU customers. The Company will charge
18 customers who enroll in the EV-TOU Pilot Program Off-Peak, On-Peak, and Shoulder
19 Period supply rates included in Duquesne Light's Retail Tariff.¹⁴ Any mismatches between
20 revenues from EV-TOU supply rates and supply costs paid to FPFR product suppliers will
21 be recovered/refunded within the existing Rider No. 8 – DSS 1307e customer class

¹⁴ The EV-TOU supply rates are designed to be revenue neutral based on each customer class' overall load profile.

1 reconciliation. This approach will avoid cost shifting across customer classes during the
2 Pilot Program and is simple to administer within the existing reconciliation process.

3
4 **Q. How will the Company's costs to implement the EV-TOU Pilot Program be
5 recovered?**

6 A. The Company proposes to recover any incremental costs incurred by the Company to
7 implement and retain the EV-TOU Pilot Program from default service customers. These
8 costs are described by Duquesne Light witness Ms. Scholl and are reflected on Exhibit
9 DBO-5. EV-TOU program costs readily attributable to a specific customer class (e.g.,
10 Residential customers) will be directly assigned to the default service class for which such
11 costs are incurred, and will be recovered in Rider No. 8. All other costs, which cannot be
12 directly assigned, will be allocated to all of the default service classes eligible to participate
13 in the program in proportion to each class' default service load.

14
15 **VII. DEFAULT SERVICE COSTS AND COST RECOVERY**

16
17 **Q. What types of administrative costs does the Company incur to provide default
18 service?**

19 A. Consistent with previous default service plans, in addition to the supply costs necessary to
20 provide default service, the Company incurs costs in two primary areas. First, initial start-
21 up costs are incurred to develop and obtain approval of the proposed default service plan.
22 Second, ongoing costs are incurred throughout the duration of the default service plan to
23 implement the plan (e.g., the costs related to the process of conducting the competitive

1 auctions and evaluating the results of these solicitations, the incremental administrative
2 costs to provide HPS, etc.).

3
4 **Q. Has the Company previously unbundled default service costs from base distribution
5 rates?**

6 A. Yes. In compliance with the terms of the non-unanimous settlement within the Petition of
7 Duquesne Light Company for Approval of a Default Service Plan for the Period June 1,
8 2017 to May 31, 2021 (DSP VIII), the Company agreed to unbundle the costs set forth in
9 Exhibit DBO-5, effective June 1, 2017.¹⁵

10
11 **Q. How does the Company currently recover administrative costs to prepare and obtain
12 approval of the proposed default service plan?**

13 A. The Company currently recovers the costs for external legal and consulting services to
14 prepare and obtain approval of the default service plan through both DSS and HPS rates.

15
16 **Q. How does the Company currently recover the ongoing administrative costs to provide
17 default service?**

18 A. The ongoing administrative costs are primarily associated with managing the competitive
19 auction process. A third-party independent evaluator conducts the recurring competitive
20 auctions to obtain DSS and HPS from wholesale suppliers, monitors the results, and
21 prepares reports to the Commission. These costs for the independent evaluator to conduct
22 the competitive auctions are easily identifiable and are recovered through an adder in the

¹⁵ DSP VIII Recommended Decision, page 7 that was approved in the DSP VIII Order entered December 22, 2016 at Docket No. P-2016-2543140.

1 applicable procurement class default service rates. These costs are included in the build-
2 up of the DSS rates in Rider No. 8 and the FRA in Rider No. 9. Cost and revenue recovery
3 associated with these administrative costs for specific activities are tracked separately for
4 each procurement group to ensure no cross-subsidy occurs. The costs for the independent
5 evaluator to conduct multiple solicitations on a given date are allocated to each
6 procurement group for recovery based on the number of solicitations for each procurement
7 class.

8
9 **Q. Did the Company update the default service costs that are recovered in default service**
10 **rates as part of its most recent 2018 base distribution rate case?**

11 A. Yes. As part of the 2018 Distribution Rate Case, the Company committed to update the
12 unbundled costs that are currently recovered in default service rates that were previously
13 approved by the Commission as part of the Petition of Duquesne Light Company for
14 Approval of a Default Service Plan for the Period June 1, 2017, to May 31, 2021 at Docket
15 No. P-2016-2543140.¹⁶

16
17 **Q. Did you prepare an estimate of the default service costs in dollars that are applicable**
18 **to the DSS and HPS rates?**

19 A. Yes. I have estimated these costs based on the information that is available at this time.
20 These costs are summarized in the table shown in Exhibit DBO-5. These are preliminary

¹⁶ Updated unbundling costs are to be fixed and reconciled only for differences between projected and actual consumption. 2018 Distribution Rate Case Order entered December 20, 2018 at Docket No. R-2018-3000124, page 17.

1 cost estimates that are subject to change based on final plan design and implementation
2 costs.

3
4 **Q. How did you estimate the costs to prepare and obtain approval of the DSP IX plan?**

5 A. The cost estimates in Exhibit DBO-5 are the consulting and legal fees to prepare and obtain
6 approval of the DSP IX plan. Similar to DSP VIII, the Company would update these
7 default service costs with actual external legal and consulting service costs to prepare and
8 obtain approval for the DSP IX plan in a future base rate proceeding filed by the Company.

9
10 **Q. How did you estimate the cash working capital costs associated with DSS and HPS
11 rates?**

12 A. The cash working capital cost shown in Exhibit DBO-5 is based on the supply-related cash
13 working capital costs that were excluded from the distribution rate base in the Company's
14 2018 base rate proceeding at Docket No. R-2018-3000124. The annual revenue
15 requirement for working capital costs shown equals the Company's pre-tax overall return
16 applied to those costs.

17
18 **Q. When does the Company propose to begin to recover these costs through DSS and
19 HPS rates?**

20 A. The Company proposes to update and recover the estimated DSP IX filing and other
21 identified costs through DSS & HPS rates beginning June 1, 2021.

22

1 **Q. Please explain how the Company proposes to assign the default service costs to each**
2 **customer class.**

3 A. Default service costs are directly assigned to the default service class for which such costs
4 are incurred. All other costs, which cannot be directly assigned, are allocated to all of the
5 default service classes in proportion to each class' forecasted default service load.
6

7 **Q. Once the total estimated costs are allocated to a customer class, how does the**
8 **Company propose to recover those costs?**

9 A. Consistent with DSP VIII, the Company proposes to divide the default service costs by the
10 approved number of years of the DSP IX Plan and develop a monthly fixed expense amount
11 for each of the three Rider No. 8 customer classes (i.e., Residential/Lighting, Small C&I,
12 Medium C&I), as well as for the Rider No. 9 customers. Consistent with DSP VIII, as
13 shown in Exhibit DBO-1, the Company will include the monthly expense amounts in the
14 derivation of the rates for each rate effective period based on the number of months in the
15 rate effective period. For example, the DSS rates effective June 1, 2021 through November
16 30, 2021 will include six months of default service expenses.
17

18 **Q. Regarding the default service costs, is the Company proposing any changes in the**
19 **reconciliation process currently in use for default service rates?**

20 A. No. The Company proposes to continue to use the four-year revenue requirement for these
21 costs as the expense to recover. The 1307e reconciliation statement for each applicable
22 customer class will include a line item for the monthly expense. The reconciliation for the
23 monthly expense will capture only changes in default service kWh sales (e.g., the

1 difference between the forecasted kWh at the outset when setting rates and actual default
2 service kWh sales). The difference in recovery of the unbundled expense (over or under
3 collection) created by variations in kWh sales will be recovered through the e-factor
4 component of the DSS and HPS rates for the applicable customer class.
5

6 **VIII. RETAIL COMPETITION COSTS AND COST RECOVERY**

7

8 **Q. What types of activities is the Company engaged in to support retail competition?**

9 A. The Company currently engages in several activities to support retail competition,
10 including:

- 11 • Administering a Purchase of Receivables (“POR”) program, whereby
12 Duquesne Light agrees to purchase the accounts receivable, without recourse,
13 associated with EGS sales of retail electric commodity services to Residential,
14 Small C&I, and Medium C&I customers within Duquesne Light’s service
15 territory.
- 16 • Administering a Standard Offer Program (“SOP”), which is designed to
17 encourage customers to shop with an EGS at a prescribed discount to the PTC
18 at the time of the offer.
- 19 • Administering other Commission-mandated activities, programs, projects,
20 services, etc. to enhance the competitive energy market in Pennsylvania.

21
22 **Q. How does the Company currently recover the costs of these retail competition**
23 **initiatives?**

1 A. The Company has several mechanisms in place to recover the costs of these retail
2 competition initiatives.

- 3 • For the POR program, defined in Rule 12.1.7 of the EGS Coordination Tariff,
4 Duquesne Light purchases the EGSs' electric commodity (which is composed of
5 generation and transmission service) receivables at a fixed discount currently set at
6 0.10% for incremental, ongoing operating and administrative expenses associated
7 with the POR Program related to these customers.
- 8 • For the SOP program, defined on pages 42B of the current EGS Coordination
9 Tariff, the Company charges participating EGSs a fee of \$10.28 for every customer
10 that is enrolled.
- 11 • The Company has the ability to recover the expenses associated with implementing
12 Commission-mandated activities, programs, projects, services, etc. to enhance the
13 competitive energy market in Pennsylvania through a non-bypassable Retail
14 Market Enhancement Surcharge ("RMES")¹⁷ defined in Rider No. 1 of the
15 Company's Retail Tariff.

16
17 **Q. Is the Company proposing to change the way it recovers these costs to support retail**
18 **competition in this proceeding?**

19
20 A. Yes. As explained by Duquesne Light witness Ms. Scholl, the Company is proposing to
21 alter its current SOP program to outsource administration of the SOP to a third-party

¹⁷ The RMES was approved in the Company's DSP VII plan effective June 1, 2015 (Docket No. P-2014-2418242).

1 vendor. The Company also proposes to modify the cost recovery of the SOP as a direct
2 pass through between the third-party vendor and the participating supplier.

3
4 **Q. Is the Company proposing to recover the cost for any new retail competition
5 programs in this processing?**

6 A. Yes. As explained by Duquesne Light witness Ms. Scholl, the Company is proposing a
7 Customer Assistance Program (“CAP”) shopping program, which would require
8 participating EGSs to charge CAP customers a rate at or below the applicable residential
9 PTC throughout the duration of the contract. Based on the projected programming and
10 administrative costs that are described in greater detail by witness Ms. Scholl, the Company
11 would propose to recover any incremental O&M costs to implement the program through
12 the Company’s Rider No. 5 - Universal Service Charge (“USC”). The Company proposes
13 to modify the USC to incorporate this cost recovery of the CAP shopping program in a
14 future compliance filing upon Commission approval of the Program. The Company
15 further proposes to recover any associated capital expense in a future base rate case.

16
17 **IX. RECOVERY OF NET METERING COMPENSATION PAID TO CUSTOMER-**
18 **GENERATORS**

19
20 **Q. Is the Company proposing any changes to the DSS rate reconciliation process related
21 to net metering compensation paid to customer-generators?**

22 A. Yes. Effective with DSP IX, the Company is proposing to recover the cash out payment
23 for net metering customers. In accordance with Rider No. 21 – Net Metering Service of
24 the Company’s current retail Tariff No. 25, the Billing Provisions state:

1 The customer-generator will receive a credit for each kilowatt-hour received by the
2 Company up to the total amount of electricity delivered to the Customer during the
3 billing period at the full retail rate consistent with Commission regulations. If a
4 customer-generator supplies more electricity to the Company than the Company
5 delivers to the customer-generator in a given billing period, the excess kilowatt hours
6 shall be carried forward and credited against the customer-generator's usage in
7 subsequent billing periods at the full retail rate. Any excess kilowatt hours shall
8 continue to accumulate for the 12 month period ending May 31. On an annual basis,
9 the Company will compensate the customer-generator for kilowatt-hours received from
10 the customer-generator in excess of the kilowatt hours delivered by the Company to
11 the customer-generator during the preceding year at the Company's Price To Compare
12 consistent with Commission regulations.
13

14 The Company proposes to recoup the customer class compensation (i.e., excess kilowatt
15 hours multiplied by the Company's PTC on May 31) as an expense in the respective default
16 service class over/under collection calculation within the Company's Rider No. 8 - DSS
17 1307e reconciliation.
18

19 **Q. Is the Company also proposing to recover the compensation paid for net metering**
20 **customers who switch to an EGS during the 12-month period ending May 31?**

21 **A.** Yes. In accordance with Rider No. 21 – Net Metering Service of the Company's current
22 retail Tariff No. 25, the Net Metering Provisions for Shopping Customers state:

23 If a customer-generator switches electricity suppliers, the Company shall treat the end
24 of the service period as if it were the end of the year (i.e. May 31).
25

26 The Company proposes to recoup the customer class cash out payments that are generated
27 throughout the year (i.e., excess kilowatt hours multiplied by the Company's PTC on the
28 date of the customer switch) as a cost in the respective default service class over/under
29 collection calculation within the Company's Rider No. 8 - DSS 1307e reconciliation.
30

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Q. Have you prepared an illustrative exhibit that shows the inclusion of the net metering cost recovery in the Company’s Rider No. 8 - DSS 1307e reconciliation?

A. Yes. Exhibit DBO-6 is an illustrative example showing the inclusion of the net metering cost recovery within the Rider No. 8 - Residential and Lighting class 1307e Statement – Reconciliation of Revenues and Expense and Appendix A – Transmission Service Charge 1307e Statement – Reconciliation of Revenues and Expense.

X. RECONCILIATION PERIODS AND PRICE TO COMPARE POSTING

Q. What reconciliation period does the Company currently use for DSS rates?

A. DSS rates are currently reconciled on a six-month basis. In general, the current reconciliation period is the six-month period ending 120 days prior to the effective date of the new rates. New rates effective on June 1st include reconciliation of actual revenue and actual expense for the six months ending January 31st. New rates effective on December 1st include reconciliation of actual revenue and actual expense for the six months ending July 31st. For the statements necessary for 1307e filing requirements which are on a twelve-month basis, the Company combines two six-month reconciliation periods and submits a twelve-month reconciliation filing for the twelve months ending January 31st in accordance with 66 Pa C.S. § 1307e. The reconciliation periods are defined in Rider No. 8 – DSS of the Company’s current retail Tariff No. 25.

1 **Q. What reconciliation period does the Company currently use for HPS rates?**

2 A. The Company portion of the FRA is currently reconciled on a twelve-month basis. The
3 current reconciliation period is the twelve-month period ending 120 days prior to the
4 effective date of the new rates. New rates effective June 1st include reconciliation of actual
5 revenue and actual expense associated with the Company portion of the FRA for the twelve
6 months ending January 31st. The reconciliation period is defined in Rider No. 9 – Day-
7 Ahead HPS of the Company’s current retail Tariff No. 25. All other cost components of
8 Rider No. 9 are the responsibility of the wholesale supplier(s).

9

10 **Q. Is the Company proposing any changes to the reconciliation periods in this**
11 **proceeding?**

12 A. No. The reconciliation periods were approved in DSP VIII to provide sufficient time for
13 EGSs to evaluate the impact to the PTC. The Company is proposing to continue the same
14 reconciliation schedule in DSP IX.

15

16 **Q. Please explain the current process of how the Company posts the PTC.**

17 A. The Company has implemented the following steps in its procurement process to post the
18 PTC:

- 19 • Post an estimated PTC and default service rate model within 60 days of
20 the PTC becoming effective.
- 21 • Once the Company receives the secretarial letter approving the
22 Company’s default service rates, the Company posts the final PTC and

1 default service rate model showing the derivation of the final default
2 service rates.

3
4 **Q. How is the Company proposing to post the PTC in this proceeding?**

5 A. The Company proposes to continue its current practices and will post the PTC 60 days in
6 advance of each application period except for the June 1 application period. For the June
7 1 application period, the Company will post the supply component in the default service
8 rate model 60 days in advance and will post the final PTC, including the transmission
9 component, 15 days in advance because the transmission component of the PTC will not
10 be known until May 15 of each year.

11
12 **XI. RETAIL AND EGS TARIFF CHANGES**

13
14 **Q. Have you prepared a Retail Tariff supplement that contains changes necessary to
15 implement the Company's proposed default service plan?**

16 A. Yes. Exhibit DBO-7 contains the necessary changes to the applicable riders to implement
17 the proposed default service plan. Exhibit DBO-8 is a red-line version of the current Retail
18 Tariff reflecting the proposed changes in Exhibit DBO-7.

19
20 **Q. In general, what changes is the Company proposing to make to the Retail Tariff?**

21 A. The proposed changes are necessary to implement the proposed default service plan in this
22 proceeding and recover the associated costs. The Company proposes to make the following
23 modifications to reflect the default service plan described above:

- 1 • Rider No. 8 – Default Service Supply: expanded to include the new EV-TOU
2 Pilot Program, including the new rates, a description of the new EV-TOU rate
3 calculation, and a modification to the reconciliation provisions to clarify that
4 EV-TOU and standard default service rate over/under collections will be
5 calculated in total for each procurement class.
- 6 • Rider No. 21 – Net Metering Service: Added billing provisions for EV-TOU
7 customer-generators to describe the billing and cash-out process for EV-TOU
8 customer-generators.

9

10 **Q. Have you prepared a form of Electric Generation Supplier Coordination Tariff**
11 **Supplement that contains changes necessary to implement the Company’s proposed**
12 **default service plan?**

13 A. Yes. Exhibit DBO-9 contains the necessary changes to the language and applicable riders
14 to implement the proposed default service plan. Exhibit DBO-10 is a red-line version of
15 the current EGS Tariff reflecting the proposed changes in Exhibit DBO-9.

16

17 **Q. In general, what are the changes that the Company is proposing to the EGS Tariff?**

18 A. The proposed changes are necessary to implement the proposed default service plan in this
19 proceeding and recover the associated costs. The Company proposes to make the following
20 modifications to reflect the default service plan described above:

- 21 • As explained by Duquesne Light witness Scholl, the Company is proposing to
22 increase the SOP charge for participating EGSs to \$30.00 for every customer
23 that is enrolled.

- 1 • All other proposed revisions to the EGS Coordination Tariff consist of
2 housekeeping updates administrative in nature and/or updates to language to
3 reflect current business practice.

4

5 **XII. CONCLUSION**

6

7 **Q. Does this conclude your Direct Testimony at this time?**

8 **A. Yes.**

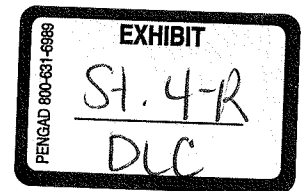
DUQUESNE LIGHT STATEMENT NO. 4-R

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition Of Duquesne Light
Company For Approval Of
Default Service Plan For The
Period June 1, 2017 Through
May 31, 2021**

**:
:
:
:**

Docket No. P-2020-3019522



**REBUTTAL TESTIMONY OF
DAVID B. OGDEN**

Dated: August 14, 2020

1 **Q. Please state your full name and business address.**

2 A. My name is David B. Ogden. My business address is 411 7th Avenue, Pittsburgh
3 PA 15219.

4

5 **Q. What is your position at Duquesne Light Company?**

6 A. I am the Manager of Rates and Tariff Services for Duquesne Light Company
7 (“Duquesne Light” or “Company”).

8

9 **Q. Did you previously submit direct testimony in this proceeding on behalf of the**
10 **Company?**

11 A. Yes. I submitted my direct testimony, Statement No. 4, on April 20, 2020, with the
12 Company’s initial filing.

13

14 **Q. What is the purpose of your rebuttal testimony in this proceeding?**

15 A. My rebuttal testimony responds to the comments made by intervenors related to
16 rate design, cost allocation, cost recovery mechanisms, and proposed tariff changes.
17 Specifically, I address:

18

19 Rate Design

20 1. Office of Consumer Advocate (“OCA”) witness Dr. Serhan Ogur’s
21 recommendation to annually update the Company’s supply rate factors.

1 2. The Natural Resources Defense Council (“NRDC”) witness Kathleen Harris’s
2 comments related to the design of the EV-TOU rates.

3

4 Cost Allocation

5 3. OCA witness Dr. Serhan Ogur’s comments regarding the customer class
6 allocation of EV-TOU costs to individual default service customer classes.

7

8 Cost Recovery Mechanisms

9 4. OCA witness Dr. Serhan Ogur’s recommendation to modify Duquesne Light’s
10 reconciliation process.

11 5. The OCA witness Barbara Alexander’s and CAUSE-PA witness Harry Geller’s
12 cost recovery proposals for the Company’s CAP Shopping Program.

13 6. OCA witness Barbara Alexander’s comments on the Price To Compare
14 (“PTC”).

15 7. The EGS Parties witness Christopher Kallaher’s proposal regarding the cost
16 recovery of network integration transmission service (“NITS”).

17 Tariff Changes

18 8. Describe the proposed changes to the Company’s Electric Generation Supplier
19 (“EGS”) Coordination tariff in addition to those originally presented within
20 DBO Exhibits 9 and 10.

21 **Q. Are you sponsoring any exhibits as part of your Rebuttal Testimony?**

1 A. Yes. I am sponsoring the following exhibits:

- 2 • Exhibit DBO-1R – Proposed Retail Tariff Supplement (clean version)
- 3 • Exhibit DBO-2R – Proposed Retail Tariff Supplement (red-line version)
- 4 • Exhibit DBO-3R – Proposed EGS Tariff Supplement (clean version)
- 5 • Exhibit DBO-4R – Proposed EGS Tariff Supplement (red-line version)

6

7

1. SUPPLY RATE FACTORS

8

9 **Q. Please summarize the supply rate factor proposal presented by OCA witness**
10 **Ogur.**

11 A. Witness Ogur recommends that the Company should recalculate its Residential
12 customer class supply rate factors each year based on a rolling four-year average
13 of customer class load load-weighted LMPs and PJM capacity prices applicable to
14 the delivery year, to prevent the rate factors from becoming “stale” and cease to
15 reflect relative incremental costs of serving load in each TOU period.¹

16

17 **Q. Do you agree with Dr. Ogur’s position?**

18 A. Yes. The Company agrees with Dr. Ogur’s position. The EV-TOU supply rate
19 factors (i.e. Exhibit DBO-4), along with the residential/lighting supply rate factors

¹ OCA Statement No. 1, page 13, lines 13-17.

1 (i.e. Exhibit DBO-2) will be updated annually and become effective June 1 of
2 each year for the period June 1, 2021 through May 31, 2025. As part of this
3 process, the Company will update both the EV-TOU and residential/lighting
4 supply rate factors using the load-weighted LMPs from the most recent four
5 calendar years as well as update the supply rate factors with the most recently
6 published capacity auction prices. The Company proposes to update the supply
7 rate factors when it files its tariff supplement to update the Default Service Supply
8 rates effective June 1 of each year, which is filed on a 60 day notice.

9
10 **Q. Have you prepared a revised proposed tariff supplement?**

11 A. Yes. I have included a revised proposed retail tariff supplement that clarifies this
12 annual supply rate factor update along with my rebuttal testimony. Exhibit DBO-
13 1R contains the proposed changes that reflect clarification regarding the annual
14 supply rate factor updates. The changes reflected in Exhibit DBO-1R are in
15 addition to the proposed tariff supplement changes presented in my direct
16 testimony within Exhibits DBO-7 and DBO-8.

17
18 **2. EV-TOU RATE DESIGN**

19
20 **Q. Does NRDC witness Harris support Duquesne Light's proposed EV-TOU**
21 **program?**

1 A. Yes, NRDC witness Harris recommends the Commission approve Duquesne
2 Light's EV-TOU program with certain modifications highlighted on pages 3 and 4
3 of her direct testimony.² Duquesne Light witness Katie Scholl responds to Ms.
4 Harris's comments about customer education and the EV-TOU program in general,
5 while I respond to the NRDC comments specifically related to the design of the
6 EV-TOU rates.

7

8 **Q. When addressing the Residential EV-TOU program, NRDC witness Harris**
9 **states that Duquesne Light should ensure that the ratio of the EV-TOU on-**
10 **peak price to the off-peak price is sufficient to motivate customers to shift their**
11 **load and charging times to off-peak hours.³ How do you respond?**

12 A. The Company's proposed On-Peak Period, Shoulder Period, and Off-Peak Period
13 rate factors (and the associated on-peak to off-peak price ratio) are based on the
14 specific characteristics of applicable price and load data for Duquesne Light's
15 service area, as well as other customer care, metering and communication
16 considerations.

17 To help determine the timing of the EV-TOU periods, the Company
18 reviewed hourly energy market prices and hourly loads using data spanning January
19 2016 through December 2019. The On-Peak Period is designed to include the times
20 when energy market prices and eligible customer classes' (Residential, Small C&I,
21 and Medium C&I) loads are generally highest during the day, while the discounted

² NRDC Statement No. 1, page 3, line 4 through page 4, line 2.

³ NRDC Statement No. 1, page 10, lines 11-12.

1 Off-Peak Period (from 11:00 PM through 6:00 AM) that applies every day of the
2 week is designed to correspond to generally lower energy market prices, be simple
3 for customers to understand, and provide sufficient time for customers to charge
4 their electric vehicles at discounted rates when customer load is relatively low on
5 Duquesne Light's system.

6
7 **Q. Does NRDC make a specific recommendation with respect to the EV-TOU**
8 **price ratio or time periods?**

9 A. No, neither the Company's EV-TOU price ratio nor the time periods are addressed
10 in NRDC's recommendations cited on pages 3-4 and again on page 22 of NRDC
11 Statement No. 1. Ms. Harris generally supports the EV-TOU program and simply
12 encourages the Company to look to best practices from other jurisdictions. The
13 Company plans to evaluate the progress of its EV-TOU Pilot Program and will
14 update the EV-TOU supply rate factors each year based on new market price and
15 customer load information.

16
17 **Q. How do you respond to NRDC witness Harris' recommendation to adopt**
18 **certain "best practices" for C&I rates that she identifies from a Synapse**
19 **report?⁴**

20 A. Duquesne Light's proposed EV-TOU supply rates appear to follow the best practice
21 principles for C&I rates that Ms. Harris identifies. Duquesne Light's EV-TOU

⁴ NRDC Statement No. 1, page 4, lines 1-2 and page 21, lines 3-12.

1 supply rates are designed to promote efficient use of Duquesne Light's system, are
2 easy to understand and predictable, are designed with end users in mind, do not
3 include demand charges,⁵ are designed to allow the Company to cover its associated
4 default service supply costs,⁶ and, at the same time, should allow participating EV-
5 TOU customers to receive the benefits of adding EV load at discounted rates during
6 the off-peak period.

7
8 **3. EV-TOU CUSTOMER CLASS COST ALLOCATION**

9
10 **Q. Please summarize the EV-TOU customer class cost allocation concern**
11 **presented by OCA witness Ogur.**

12 **A.** Witness Ogur notes that the Company provided the allocation of the first-year
13 EV-TOU Pilot Program cost of \$92,600 in Duquesne Light Exhibit DBO-5, line
14 2, with a labeled allocation mechanism of "direct assignment". Witness Ogur
15 argues that the Company does not explain how the total program cost or how the
16 cost of each program category was allocated/assigned to individual default service
17 customer classes. He avers that allocating more than 96 percent of the total first-

⁵ I am not here opining on the appropriateness of including demand charges in other rates – such as distribution rates – that may be applicable to EV customers. I merely observe that the Company's proposed EV-TOU supply rate does not include a demand component, consistent with Ms. Harris's recommendation.

⁶ See my direct testimony, DLC St. No. 4, at page 19, line 20 – page 20, line 1: "Any mismatches between revenues from EV-TOU supply rates and supply costs paid to FPFPR product suppliers will be recovered/refunded within the existing Rider No. 8 – DSS 1307e customer class reconciliation."

1 year program cost to the residential and lighting default service customer class
2 requires a detailed explanation by cost category from the Company.⁷

3
4 **Q. What is your response to Dr. Ogur's concern?**

5 A. Company witness Scholl addressed Dr. Ogur's concern with its responses to
6 discovery request OCA Set IV. Ms. Scholl is sponsoring her answers to those
7 questions as part of her Exhibit KMS-2R. The discovery requests, in part, asked
8 the Company to detail how it determined and justified the direct assignment of
9 costs for the first-year of the EV-TOU Pilot Program for each procurement class
10 shown in Exhibit DBO-5, Line 2 – EV TOU Cost Allocation. Exhibit DBO-5,
11 Line 2 represents the first year of the projected EV-TOU costs and is a summary
12 of the detailed list of costs in Exhibits KMS-2 and KMS-2R. Based on the
13 detailed listing in those Exhibits, the webpage and educational email costs were
14 split evenly between the three eligible customer classes. The remainder of the
15 educational materials are geared toward the Residential class so the costs for the
16 online bill estimate tool, bill insert, digital advertising, print collateral and event
17 promotion, and the EV-TOU monthly email set-up were directly allocated to the
18 Residential customer class. The Residential customer class was directly assigned
19 most of the EV-TOU marketing and education costs because the vast majority of
20 these costs target the Residential customer class. More detailed conversations
21 with Small and Medium C&I < 200 kW customers will take place in the normal

⁷ OCA Statement No. 1, page 14, lines 9-19.

1 course of business through the Company's Business Account Managers and the
2 Transportation Electrification Team to inform the Small and Medium C&I < 200
3 kW customers of the rate option.

4
5 **4. RECONCILIATION**

6
7 **Q. Please summarize the reconciliation proposal presented by OCA witness**
8 **Ogur.**

9 A. Dr. Ogur proposes that, for the Residential customer class, a six-month
10 reconciliation account balance be amortized over 12 months and the reconciliation
11 charge be reset every six months. He argues that this would provide additional
12 stability in rates for Residential default service customers and also permit the
13 default service rates to be more reflective of market prices since the reconciliation
14 adjustment can be expected to be smaller than if amortized over a 6-month period.⁸
15 Dr. Ogur acknowledges that if the Company needed to invoke the proposed
16 contingency plan, a portion of the Residential default service supply could be
17 provided through the PJM spot market, which in turn would result in higher
18 amounts subject to reconciliation and a higher E Factor Rate.⁹

19
20 **Q. What is your response to Dr. Ogur's reconciliation proposal?**

⁸ OCA Statement No. 1, page 17, lines 9-14.

⁹ OCA Statement No. 1, page 15, lines 23-24 and page 16, lines 1-4.

1 A. The Company does not believe that there is a significant chance of experiencing
2 large over or under collections in its proposed DSP IX plan given the Company's
3 proposed reliance on fixed-price, full requirements supply contracts. For
4 Residential default service customers, the over/under collection component of the
5 Default Service Supply ("DSS") rate has deviated, on an absolute average basis, by
6 only +/- \$0.42 per MWh since the Company started relying on competitive
7 solicitations to procure fixed-price, full requirements contracts to supply residential
8 customers. The Company resets the over/under component of the DSS rate every
9 6 months and formally reconciles revenue and expense for the twelve months
10 ending January 31 in compliance with Section 1307(e) requirements. This process
11 has worked well since its inception in June 2013, under the Company's DSP IV,
12 and has resulted in relatively small over/under collections in residential DSS rates.

13 While the Company agrees with Dr. Ogur that a 12 month amortization
14 period could smooth the over/under collection amount compared to a six-month
15 reconciliation, the Company notes that there would not be a meaningful impact to
16 the PTC. Since inception, Duquesne Light has not had to rely on the contingency
17 plan for the residential DSS rates. However, if the contingency plan is activated,
18 the Company could seek a waiver of the reconciliation period under those
19 circumstances, to the extent warranted, to allow for less frequent reconciliations to
20 counteract any volatility in the spot market.

21

22 Q. **Please summarize the additional elements presented by OCA witness Ogur**
23 **that he expects to contribute to the volatility of the E Factor Rates.**

1 A. Dr. Ogur identifies three additional factors that he offers may contribute to e-factor
2 volatility. First, Duquesne Light proposes to supply residential EV-TOU loads from
3 the same wholesale supply products as the rest of the residential and lighting default
4 service customers, which he argues could generate a mismatch between energy
5 revenue collected (using time-differentiated rates) and the costs recovered (which
6 compensate the wholesale suppliers at fixed, per kWh rates). Second, Duquesne
7 Light proposed to sell the energy (and perhaps ancillary services as well) it plans
8 to acquire as part of the long-term solar PPA into the PJM spot market. Third,
9 Duquesne Light proposes to recover the cash-out payment for net metering
10 customers through the reconciliation mechanism as part of the E-Factor Rate.¹⁰

11

12 **Q. What is your response to Dr. Ogur's first element that he expects will**
13 **contribute to the volatility of the E Factor Rates?**

14 The first is the EV-TOU mismatch between energy revenue collected (using time
15 differential rates) and the costs recovered (which compensate the wholesale
16 supplier(s) at fixed, per kWh rates). The Company initially anticipates residential
17 enrollment of about 15% of EV driving customers in the first year, with a gradual
18 increase to around 25% over the 4-year period as awareness of the EV-TOU Pilot
19 Program grows and more EV driving customers become interested.¹¹ At 15% of
20 EV driving customers, this would reflect approximately 2,800 MWhs, or 0.1 % of

¹⁰ OCA Statement No. 1, page 16, lines 5-18.

¹¹ DLC Statement No. 5, page 25, lines 11-14.

1 the total forecasted POLR Sales for the period June 1, 2021 through May 31, 2022
2 of 2,722,000 MWhs.¹² The Company does not foresee such a small percentage of
3 the customer load contributing any material volatility to its E Factor Rates.

4
5 **Q. What is your response to Dr. Ogur's second element that he argues may**
6 **contribute to the volatility of the E Factor Rates?**

7 A. The second potential contribution is the Company's proposal to sell the energy and
8 associated services it plans to acquire as part of the long-term solar PPA into the
9 PJM spot market. The difference between the projected and realized revenues will
10 be included in the amounts subject to reconciliation. The Company proposed a
11 similar concept for the solar arrangement as part of its DSP VIII proceeding at
12 Docket No. P-2016-2543140.¹³ Although the structure of the solar arrangement
13 was not known at that time, the Company still proposed to include any
14 refund/recoupment from proceeds for solar energy, capacity, and ancillary services
15 acquired and in excess of those allocated to default service suppliers. The Company
16 proposed at that time that any over/under would be sold into the market, and
17 reflected through Rider No. 8. On its own merit, this proposal did not warrant
18 altering the Company's semi-annual reconciliations as part of DSP VIII, and the

¹² Exhibit DBO-5, column C, line 4.

¹³ Except, as OCA witness Ogur correctly notes, in DSP IX Duquesne Light proposes to assign the costs and benefits of the solar PPA(s) to all default service loads at the same weighting as each customer class' solar alternative energy credits obligation share; whereas, in DSP VIII the Company had proposed to assign all costs and benefits of the solar contract(s) exclusively to the Residential default service customers. OCA Statement No. 1, page 19, lines 2-7.

1 Company continues to believe that it does not warrant a change to its reconciliation
2 periods as part of DSP IX.

3 As further described by Witness Davis,¹⁴ the Company is evaluating the
4 benefits of entering into a long-term Purchase Power Agreement to support a
5 utility-scale solar project up to a total of 7 MWs. For illustrative purposes,
6 assuming the project is at the full 7 MWs, with an estimated load factor of 12.5%,
7 this would represent approximately 7,665 MWhs, or 0.3% of the total forecasted
8 Default Service Supply sales for the period June 1, 2021 through May 31, 2022 of
9 2,722,000 MWh.¹⁵ The Company does not foresee such a small percentage of the
10 customer load contributing material volatility to its E Factor Rates.

11
12 **Q. What is your response to Dr. Ogur's third element that he argues may**
13 **contribute to the volatility of the E Factor Rates?**

14 The third potential contribution is the Company's proposal to recover the cash-out
15 payment for net metering customers through the reconciliation mechanism as part
16 of the E-Factor Rate. Contrary to Dr. Ogur's concern, the Company's proposed
17 method of recovering the cash-out payment for net metering customers will reduce
18 the volatility of the E-Factor Rate. The Company's proposed method will better
19 match supply revenues billed to default service customers with offsetting purchase
20 power expenses associated with supply purchased from wholesale suppliers, as well
21 as any excess generation that is purchased from customer-generators. The

¹⁴ DLC Statement No. 1, page 13, lines 27-30.

¹⁵ Exhibit DBO-5, column C, line 4.

1 generation by customer-generators offsets the amount of electric supply the
2 Company purchases from wholesale suppliers.

3

4 **Q. Does the Company have provisions in its current Tariff No. 25 and its**
5 **proposed pro forma tariff supplement to address situations of large over or**
6 **under collections?**

7 A. Yes. Page No. 104 of the Company's current Tariff No. 25 and proposed pro
8 forma tariff supplement (Duquesne Light Exhibit DBO-7 and DBO-8) in Rider
9 No. 8 - Default Service Supply ("DSS"), includes the following language to
10 address large over or under collections:

11 Pursuant to 52 Pa. Code §69.1809(c), upon determination that the DSS, if
12 left unchanged, would result in a material over or under collection of
13 supply-related costs incurred or expected to be incurred during the
14 effective period, the Company may file with the Commission for an
15 interim revision of the DSS to become effective thirty (30) days from the
16 date of filing, unless otherwise ordered by the Commission.

17

18 Therefore, Dr. Ogur's recommendations are not necessary, as the Company
19 already has sufficient safeguards in place.

20

21 **Q. Has the Company ever filed an interim revision of the DSS for any of the**
22 **customer classes?**

23 A. No.

24

1 **Q. Does any witness oppose the Company's proposal to recover cash-out**
2 **payments for residential net metering customers through the residential e-**
3 **factor rates?**

4 A. No, not directly. Dr. Ogur is not opposing the Company's proposal to recover cash-
5 out payments for residential net metering customers through the residential E-
6 Factor Rates at this time, since these cash-out sums are currently relatively small.
7 However, Dr. Ogur goes on to say that the issue may need to be revisited if and
8 when these payments reach more significant amounts, with an eye toward rate
9 stability for Residential default service customers and ensuring equitable allocation
10 of these costs. While Dr. Ogur does not take issue with the Company's right to
11 recover any legitimate costs, he suggests that there may be better mechanisms
12 through which Duquesne Light could recover these costs in the future.¹⁶

13
14 **Q. Are you aware of any other PA Electric Distribution Company ("EDC") that**
15 **recovers net metering cash-out payments from residential customers?**

16 A. Yes. I am aware of at least one EDC, PPL Electric, that includes a similar
17 adjustment to its Generation Supply Charge ("GSC-1")¹⁷ and its Transmission
18 Service Charge.¹⁸

19

¹⁶ OCA Statement 1, page 16, lines 24-25, and page 17, lines 1-6.

¹⁷ Docket M-2020-3019639, PPL Electric Generation Supply Charge-1 Reconciliation Report for the Period April 1, 2019 through March 31, 2020, Schedule 1, line 2C.

¹⁸ Docket M-2020-3019649, PPL Electric Generation Supply Charge-1 Reconciliation Report for the Period April 1, 2019 through March 31, 2020, Schedule 1, line 4.

1 **5. CAP SHOPPING COST RECOVERY**

2

3 **Q. Please summarize the cost recovery concerns that were raised by OCA witness**
4 **Barbara Alexander and CAUSE-PA witness Harry Geller.**

5 A. OCA witness Barbara Alexander questions the Company's proposal that the capital
6 costs to implement the CAP shopping program be recovered from customers in a
7 future base rate case. OCA witness Alexander further objects to recovering any of
8 the educational expenses associated with the program via the Universal Service
9 Charge.

10 CAUSE-PA witness Harry Geller recommends that if Duquesne Light's
11 CAP shopping plan were to be approved, any costs associated with CAP shopping
12 should be recovered from suppliers who wish to participate in the program.¹⁹

13

14 **Q. What is the Company's response to the OCA and CAUSE-PA proposals?**

15 A. I will address the capital costs and O&M costs separately. With regard to capital
16 costs, the Company proposed to recover these costs in a future base rate case.²⁰
17 The Company has historically addressed the recovery of utility plant additions to
18 rate base as part of a general rate case as defined in 66 Pa.C.S. § 1308. Outside of
19 the Company's Distribution System Improvement Charge ("DSIC"), which
20 currently does not allow for the recovery of intangible plant, the only remaining

¹⁹ CAUSE-PA Statement No. 1, page 52, lines 20-22.

²⁰ DLC Statement No. 4, page 27, lines 14-15.

1 avenue that the Company can use to recover its capital costs and a reasonable
2 return thereon is through base rates.

3 With regard to O&M costs, the Company proposed to recover any
4 incremental O&M costs to implement the program through the Company's Rider
5 No. 5 – Universal Service Charge ("USC"). Recovering these costs through the
6 USC is appropriate because CAP Shopping supports the Company's CAP
7 program (as well as CAP customers). Alternatively, insofar as the costs
8 associated with the implementation of a CAP Shopping Program are incurred to
9 further retail consumer choice, they could conceivably be recovered through the
10 Company's Retail Market Enhancement ("RME") surcharge. The Company
11 initially decided against the recovering the costs through the RME to avoid further
12 financial impact on CAP customers' bills.

13 Regarding the direct recovery from participating EGSs, it is difficult for
14 the Company to predict how many EGSs will participate, and for what length, in
15 order for the Company to develop a rate to accurately recover the costs incurred.
16 The Company also believes that imposing costs solely on EGSs, especially where
17 the Program development will occur in advance of customer enrollment and EGS
18 contracts, could discourage EGSs from participating in the Program.

19
20 **6. PRICE TO COMPARE ADJUSTMENTS IN 2018**

1 **Q. OCA Witness Barbara Alexander indicates that she did not know why the**
2 **Company's PTC changed an additional third time in 2018 (OCA St. No. 2, p.**
3 **10 FN13). Can you explain?**

4 A. Yes. As previously discussed, the Company typically updates its residential PTC
5 every six months for rates effective June 1st and December 1st. As Witness
6 Alexander noted, the Company elected to make an interim adjustment to its PTCs
7 for rates effective October 1, 2018. This update reflects the Company's interim
8 adjustment to its Transmission Service Charge ("TSC"), approved September 24,
9 2018 at Docket No. M-2018-3004691, to account for certain refunds the Company
10 began receiving pursuant to the Federal Energy Regulatory Commission's
11 ("FERC") Order on Contested Settlement, issued May 31, 2018, at FERC Docket
12 No. EL05-121-009 ("Settlement Order").

13

14

7. NITS COST RECOVERY

15

16 **Q. Before responding to the EGS Parties' recommendation concerning NITS cost**
17 **recovery, please summarize how the Company recovers PJM transmission**
18 **charges.**

19 A. The Company recovers PJM transmission charges associated with default service,
20 including NITS, through its TSC. These charges are FERC approved and billed
21 pursuant to the PJM open access transmission tariff ("OATT"). The TSC provides
22 the Company recovery of its costs for transmission service associated only with

1 default service load and establishes the basis of the transmission component of the
2 PTC. These costs are defined within the Supplier Master Agreement (“SMA”) as
3 the responsibility of the Electric Distribution Company (“EDC”).²¹ Customers who
4 elect to shop with an EGS do not pay the TSC.

5
6 **Q. Is the Company proposing to alter how it recovers PJM transmission charges?**

7 A. No. The Company is not proposing any changes to how it recovers PJM
8 transmission charges.

9
10 **Q. Please summarize witness Kallaher’s recommendations on cost recovery of**
11 **NITS transmission charges.**

12 A. Witness Kallaher, testifying for the EGS Parties, recommends transferring cost
13 responsibility for NITS from suppliers to Duquesne Light. He specifically states,
14 “Duquesne should treat NITS charges just as it treats other NMBs [Non-Market
15 Based charges]²² and collect and remit them on behalf of all customers through a
16 non-bypassable charge.”²³

17
18 **Q. Are there factual errors within witness Kallaher’s recommendation?**

²¹ DLC Statement No. 2, Exhibit JP-3, pages 1-11.

²² EGS Statement No. 1, Page 27, Lines 5-10 defines NMB charges as Generation Deactivation/Reliability Must Run charges; Regional Transmission Expansion Plan charges; and, Expansion Cost Recovery charges (collectively, “Other PJM Charges”). NITS and Other PJM Charges are generally referred to as Non-Market Based (“NMB”) Charges.

²³ EGS Parties Statement No. 1, page 33, lines 1-3.

1 A. Yes. Mr. Kallaher states that Duquesne Light should treat NITS charges just as it
2 treats other NMBs and collect and remit them on behalf of all customers through a
3 non-bypassable charge. This statement is factually incorrect. The Company does
4 not recover any NMB transmission charges through a non-bypassable charge.

5

6 **Q. Are there any other errors in witness Kallaher's testimony regarding NITS**
7 **recovery?**

8 A. Yes. Witness Kallaher states that the Company's PTC changes on a quarterly
9 basis,²⁴ which is true for the Medium C&I customers with demands under 200 kW,
10 but the Company updates the PTCs for Residential, Lighting, and Small C&I
11 customer classes on a 6-month basis, with new PTC rates effective June 1st and
12 December 1st.

13

14 **Q. Has the Commission previously considered recommendations to recover NITS**
15 **through a non-bypassable charge in prior DSP proceedings?**

16 A. Yes, the Commission has previously considered and rejected such proposals in the
17 Company's DSP VI and DSP VII proceedings.

²⁴ EGS Parties Statement No. 1, page 32, lines 4-5.

1 This issue was fully litigated in the Company’s DSP VI proceeding. In that
2 proceeding, RESA proposed that the Company implement a non-bypassable charge
3 to recover NITS, among other costs.²⁵ The Commission rejected RESA’s proposal:

4 We believe that Duquesne’s position that EGSs should continue to
5 recover transmission and transmission-related costs, such as PJM’s
6 RTEP costs, NITS costs, expansion costs, generation deactivation
7 costs and ELR costs, from their own customers is reasonable and
8 should be approved. We agree with Duquesne that it appropriately
9 recovers these costs only from default service customers, and that
10 EGSs should recover these costs from their customers. We believe
11 that this cost recovery process is consistent with the
12 Commonwealth’s continued migration to a more competitive retail
13 market, and that RESA’s proposal would be a step backward
14 because it would result in the rebundling of transmission costs with
15 distribution rates.²⁶

16
17 RESA made a materially identical recommendation in the Company’s DSP
18 VII proceeding. The parties again litigated the issue, and the Commission again
19 rejected RESA’s recommendation, finding:

20 [T]he evidence presented by RESA and Exelon Gen is insufficient
21 to cause the Commission to alter our decision within Duquesne’s
22 DSP VI proceeding that the costs in question should not be collected
23 through a non-bypassable recovery mechanism as proposed by these
24 two Parties or that Duquesne should assume the cost responsibility
25 for all of these charges on behalf of both the wholesale and default
26 service suppliers and EGSs.²⁷

²⁵ Christopher Kallaher represented RESA as a witness within the Company’s DSP VI proceeding, but did not directly address transmission charges.

²⁶ Petition of Duquesne Light Company for Approval of a Default Service Program and Procurement Plan for the Period June 1, 2013 through May 31, 2015 at Docket No. P-2012-2301664, Opinion and Order dated January 25, 2013, page 221-222.

²⁷ Petition of Duquesne Light Company for Approval of a Default Service Program and Procurement Plan for the Period June 1, 2015 through May 31, 2017 at Docket No. P-2014-2418242, Opinion and Order dated January 15, 2015, page 45-46 and 52-53.

1 In summary, the Commission has already rejected Mr. Kallaher's
2 recommendation twice.

3
4 **Q. Has Mr. Kallaher provided any new arguments to support his**
5 **recommendation?**

6 A. No.

7
8 **Q. Do you agree with witness Kallaher's recommendation?**

9 A. No. First, as noted above, this topic was litigated twice before as part of the
10 Company's DSP VI and DSP VII proceedings. Both times, the Commission agreed
11 with the Company's position regarding recovery for transmission related costs, and
12 Mr. Kallaher presents no reasons to deviate from this precedent.

13 Second, including NITS in the TSC ensures that the transmission
14 component of the rate was unbundled and "portable." Customers switching to an
15 EGS would also purchase their transmission requirements from the EGS.
16 Modifying the TSC such that it is non-bypassable would reduce the scope of
17 products subject to meaningful competition and customer choice.

18 Third, the Company has continued with the same methodology to recover
19 transmission costs for default service since customer choice began. As
20 transmission cost line items have changed over time, the Company has relied
21 upon Commission and/or FERC for guidance to define what transmission-related
22 costs are and what should be recovered from default service customers through

1 the TSC. Changing the content and structure of the TSC to a non-bypassable
2 charge will change the fundamental composition of the PTC. This change could
3 create customer confusion.

4 Fourth, changing the content and structure of the TSC could have a
5 negative impact on current shopping customers. Current shopping customers are
6 paying their EGS for applicable transmission charges through the rates charged by
7 their EGS. Implementing a non-bypassable charge could cause shopping
8 customers to pay twice for transmission service for the remainder of their EGS
9 contracts.

10 Fifth, EGSs should be able to address their concerns in the pricing offerings
11 they make available to customers. For example, some EGSs could offer to fix only
12 the supply portion of their charges and pass through the transmission charges in
13 question. EGSs also could offer to fix some, but not all charges. Other EGSs may
14 choose to fix both the supply and transmission charges for the benefit of customers.
15 Allocating all of the transmission charges into a pass-through, non-bypassable
16 charge for all customers would limit the breadth of options available to customers
17 and EGS service offerings in the competitive market.

18 Finally, even if one were to accept Mr. Kallaher's position that these costs
19 are volatile and hard to predict, this alone would not justify making such charges
20 non-bypassable. For instance, some may describe energy and capacity prices as
21 volatile and hard to predict, yet Mr. Kallaher does not suggest that these charges
22 should be non-bypassable. The competitive market in Pennsylvania established
23 generation and transmission charges to be included in the PTC. These costs

1 (including NITS) are incurred by EGSs. Duquesne Light does not believe that it is
2 proper to socialize NITS costs incurred by EGSs to all distribution customers
3 simply because they are (arguably) unpredictable. This is not a proper basis for
4 cost allocation.

5 For all these reasons, I recommend the Commission deny the EGS Parties'
6 proposal for the Company to collect and remit NITS on behalf of all customers
7 through a non-bypassable charge.

8
9 **8. EGS Coordination Tariff Changes**

10
11 **Q. In general, what is the change that the Company is proposing to the EGS
12 Coordination Tariff?**

13 **A.** As described in detail by Witness Scholl,²⁸ the Company is proposing one change
14 to the EGS Coordination Tariff:

- 15 • Rule 12.1.7 Purchase of EGS Receivables (POR) Program: revise
16 language to further enhance enforceability of this requirement.

17
18 **Q. Have you prepared an updated pro-forma version of the EGS Coordination
19 Tariff supplement that contains these changes?**

²⁸ DLC St. No. 5-R, pp. 40-41.

1 A. Yes. Exhibit DBO-3R contains the changes to Rule 12.1.7. Exhibit DBO-4R is a
2 red-line version of the originally proposed pro-forma EGS Coordination Tariff
3 supplement presented within Exhibits DBO-9 and 10.

4

5 **Q. Does this conclude your rebuttal testimony?**

6 A. Yes, it does.

Exhibit DBO- 1R

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

- DSS_b = Company costs may also include the expenses to support time-of-use (“TOU”) programs offered by the Company. Time-of-use expenses will be assigned to the applicable customer class for recovery through this Rider. (C)

- SLR = The costs associated with any Commission-approved solar contracts and its administration will be recovered from the customers in the applicable procurement group(s) that have received an allocation of the AECs associated with the solar contracts. The proceeds of any solar energy, capacity, ancillary services and solar AECs that are acquired and in excess of those allocated to default service suppliers, and sold into the market, will be netted against solar contract costs.

- E = Experienced net over or under collection for each customer procurement group based on the revenue and expense for the six (6) month period ending one-hundred twenty (120) days prior to the end of Application Period. The DSS rate effective June 1 shall include reconciliation of revenue and expense for the six (6) month period October through March. The DSS rate effective December 1 shall include reconciliation of revenue and expense for the six (6) month period April through July. Interest shall be computed monthly at the rate provided for in Title 52 Pa. Code §54.190(c), from the month the over collection or under collection occurs to the effective month that the over collection is refunded or the under collection is recouped.

- S = The Company’s default service retail kWh sales to customers in the applicable Customer Class, projected for the Application Period.

- F = Rate Factor only for the residential and lighting customer groups, updated annually when DSS rates are updated, to become effective June 1st of each year. The Rate Factor shall be 1.0 for all other customer groups. DSS for residential and lighting customer groups will be obtained in the same competitive auction. The Rate Factor adjustment reflects the load shape of the residential and lighting classes. The Rate Factor will be as follows for each Application Period. (C)
(C)
(C)

Application Period	Residential	Lighting
June 1, 2021 through May 31, 2022	X.XXXX	X.XXXX
June 1, 2022 through May 31, 2023	X.XXXX	X.XXXX
June 1, 2023 through May 31, 2024	X.XXXX	X.XXXX
June 1, 2024 through May 31, 2025	X.XXXX	X.XXXX

(C)
(C)
(C)
(C)

- T = The Pennsylvania gross receipts tax rate in effect during the billing month, expressed in decimal form.

The rate shall become effective for default supply service rendered on and after the beginning of the Application Period unless otherwise ordered by the Commission, and shall remain in effect for the effective periods defined above, unless revised on an interim basis subject to the approval of the Commission. Pursuant to 52 Pa. Code §69.1809(c), upon determination that the DSS, if left unchanged, would result in a material over or undercollection of supply-related costs incurred or expected to be incurred during the effective period, the Company may file with the Commission for an interim revision of the DSS to become effective thirty (30) days from the date of filing, unless otherwise ordered by the Commission.

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued) (C)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

CALCULATION OF RATE – ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM (C)

DSS Electric Vehicle Time-of-Use Pilot Program (“DSS EV-TOU”) rates shall be supplied via the same fixed price, full requirements (“FPFR”) products that provide default service supply for the applicable customer class. The DSS EV-TOU rates will be distinguished by three time periods throughout the year. The Off-Peak Period will consist of all hours every day from 11:00 PM through 6:00 AM. The On-Peak Period will consist of all hours every day from 1:00 PM through 9:00 PM. All other hours will be included in the Shoulder Period. The same On-Peak, Off-Peak, and Shoulder Periods will be applicable to all eligible DSS EV-TOU service customers. (C)

The DSS EV-TOU rates shall be filed with the Commission no less than sixty (60) days prior to the start of the next Application Period as defined under the Default Service Supply Rate section of this Rider. Rates are reconciled on a semi-annual basis in accordance with the Default Service Supply Rate section of this Rider. The rates shall include an adjustment to reconcile revenue and expense for each Application Period. The DSS EV-TOU shall be determined to the nearest one-thousandth of one (1) mill per kilowatt-hour and shall be applied to all kilowatt-hours billed for DSS EV-TOU rates provided during the billing month. (C)

During the pilot program, the DSS EV-TOU rates will apply to all load associated with the applicable meter. (C)

$$DSS = [(CA + SLR + (DSS_a + E)/S) * F * TOU F + (DSS_b/S)] * [1/(1 - T)]$$
 (C)

Where: (C)

DSS = Default Service Supply rate as defined above, with the addition of the EV-TOU Rate Factors. (C)

TOU F = EV-TOU Rate Factors (as defined below), updated annually when DSS rates are updated, to become effective June 1st of each year, will be utilized to derive the On-Peak, Shoulder, and Off-Peak rates for the customer class based on its respective energy consumption patterns and capacity requirements, as approved in the Company's most recent DSP proceeding at Docket No. P-2020-XXXXXXX. (C)

Electric Vehicle Time-of-Use Rate Factors (C)

Application Period	Residential RS, RH, RA			Small C&I ⁽¹⁾ GS, GM<25, GMH<25			Medium C&I GM & GMH ≥ 25kW < 200 kW		
	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾
June 1, 2021 through May 31, 2022	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2022 through May 31, 2023	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2023 through May 31, 2024	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2024 through May 31, 2025	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX

⁽¹⁾Rate Schedule UMS is not eligible for the Electric Vehicle Time-of-Use Pilot Program.

⁽²⁾Denotes On-Peak

⁽³⁾Denotes Shoulder

⁽⁴⁾Denotes Off-Peak

(C) – Indicates Change

Exhibit DBO- 2R

STANDARD CONTRACT RIDERS - (Continued)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

DSS_b = Company costs may also include the expenses to support time-of-use (“TOU”) programs offered by the Company. Time-of-use expenses will be assigned to the applicable customer class for recovery through this Rider. (C)

SLR = The costs associated with any Commission-approved solar contracts and its administration will be recovered from the customers in the applicable procurement group(s) that have received an allocation of the AECs associated with the solar contracts. The proceeds of any solar energy, capacity, ancillary services and solar AECs that are acquired and in excess of those allocated to default service suppliers, and sold into the market, will be netted against solar contract costs.

E = Experienced net over or under collection for each customer procurement group based on the revenue and expense for the six (6) month period ending one-hundred twenty (120) days prior to the end of Application Period. The DSS rate effective June 1 shall include reconciliation of revenue and expense for the six (6) month period October through March. The DSS rate effective December 1 shall include reconciliation of revenue and expense for the six (6) month period April through July. Interest shall be computed monthly at the rate provided for in Title 52 Pa. Code §54.190(c), from the month the over collection or under collection occurs to the effective month that the over collection is refunded or the under collection is recouped.

S = The Company’s default service retail kWh sales to customers in the applicable Customer Class, projected for the Application Period.

F = Rate Factor only for the residential and lighting customer groups, updated annually when DSS rates are updated, to become effective June 1st of each year. The Rate Factor shall be 1.0 for all other customer groups. DSS for residential and lighting customer groups will be obtained in the same competitive auction. The Rate Factor adjustment reflects the load shape of the residential and lighting classes. The Rate Factor will be as follows for each Application Period. (C)
(C)
(C)

Application Period	Residential	Lighting
June 1, 2021 through May 31, 2022	X.XXXX	X.XXXX
June 1, 2022 through May 31, 2023	X.XXXX	X.XXXX
June 1, 2023 through May 31, 2024	X.XXXX	X.XXXX
June 1, 2024 through May 31, 2025	X.XXXX	X.XXXX

(C)
(C)
(C)
(C)

T = The Pennsylvania gross receipts tax rate in effect during the billing month, expressed in decimal form.

The rate shall become effective for default supply service rendered on and after the beginning of the Application Period unless otherwise ordered by the Commission, and shall remain in effect for the effective periods defined above, unless revised on an interim basis subject to the approval of the Commission. Pursuant to 52 Pa. Code §69.1809(c), upon determination that the DSS, if left unchanged, would result in a material over or undercollection of supply-related costs incurred or expected to be incurred during the effective period, the Company may file with the Commission for an interim revision of the DSS to become effective thirty (30) days from the date of filing, unless otherwise ordered by the Commission.

(C) – Indicates Change

STANDARD CONTRACT RIDERS - (Continued)

(C)

RIDER NO. 8 – DEFAULT SERVICE SUPPLY – (Continued)

(Applicable to Rate Schedules RS, RH, RA, GS/GM, GMH, AL, SE, SM, SH, UMS and PAL)

CALCULATION OF RATE – (Continued)

CALCULATION OF RATE – ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM

(C)

DSS Electric Vehicle Time-of-Use Pilot Program (“DSS EV-TOU”) rates shall be supplied via the same fixed price, full requirements (“FPFR”) products that provide default service supply for the applicable customer class. The DSS EV-TOU rates will be distinguished by three time periods throughout the year. The Off-Peak Period will consist of all hours every day from 11:00 PM through 6:00 AM. The On-Peak Period will consist of all hours every day from 1:00 PM through 9:00 PM. All other hours will be included in the Shoulder Period. The same On-Peak, Off-Peak, and Shoulder Periods will be applicable to all eligible DSS EV-TOU service customers.

(C)

The DSS EV-TOU rates shall be filed with the Commission no less than sixty (60) days prior to the start of the next Application Period as defined under the Default Service Supply Rate section of this Rider. Rates are reconciled on a semi-annual basis in accordance with the Default Service Supply Rate section of this Rider. The rates shall include an adjustment to reconcile revenue and expense for each Application Period. The DSS EV-TOU shall be determined to the nearest one-thousandth of one (1) mill per kilowatt-hour and shall be applied to all kilowatt-hours billed for DSS EV-TOU rates provided during the billing month.

(C)

During the pilot program, the DSS EV-TOU rates will apply to all load associated with the applicable meter.

(C)

$$DSS = [(CA + SLR + (DSS_a + E)/S) * F * TOU F + (DSS_b/S)] * [1/(1 - T)]$$

(C)

Where:

(C)

DSS = Default Service Supply rate as defined above, with the addition of the EV-TOU Rate Factors.

(C)

TOU F = EV-TOU Rate Factors (as defined below), updated annually when DSS rates are updated, to become effective June 1st of each year, will be utilized to derive the On-Peak, Shoulder, and Off-Peak rates for the customer class based on its respective energy consumption patterns and capacity requirements, as approved in the Company’s most recent DSP proceeding at Docket No. P-2020-XXXXXXX.

(C)

(C)

Electric Vehicle Time-of-Use Rate Factors									
Application Period	Residential RS, RH, RA			Small C&I ⁽¹⁾ GS, GM<25, GMH<25			Medium C&I GM & GMH ≥ 25kW < 200 kW		
	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾	ON ⁽²⁾	SH ⁽³⁾	OFF ⁽⁴⁾
June 1, 2021 through May 31, 2022	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2022 through May 31, 2023	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2023 through May 31, 2024	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX
June 1, 2024 through May 31, 2025	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX	X.XX

(C)

⁽¹⁾Rate Schedule UMS is not eligible for the Electric Vehicle Time-of-Use Pilot Program.

⁽²⁾Denotes On-Peak

⁽³⁾Denotes Shoulder

⁽⁴⁾Denotes Off-Peak

(C) – Indicates Change

Exhibit DBO- 4R

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM Duquesne will purchase the accounts receivable, without recourse, associated with EGS sales of retail electric commodity, composed of generation and transmission services, to residential customers and commercial and industrial (“C&I”) customers with monthly metered demand less than 300 kW within Duquesne’s service territory. Eligible customers are those customers taking delivery service under the Company’s retail tariff Rate RS, RH, RA, GS/GM and GMH, and who purchase their electric commodity requirements from the EGS through consolidated billing with the Company. Upon request, an EGS shall provide a written certification to Duquesne that the EGS is providing only basic electric supply to residential customers billed through consolidated billing with the Company. Commercial and industrial customers will be separated into two categories for purposes of the Purchase Price Discount discussed in Section 12.1.7.2. Small C&I customers will be those customers with monthly metered demand less than 25 kW and Medium C&I customers will be those customers with monthly metered demand equal to or greater than 25 kW. The classification of customers as less than or equal to or greater than 25 kW is discussed in detail in the Company’s retail tariff Rate GS/GM and Rate GMH. Under the POR program, Duquesne will reimburse EGSs for their customer billings regardless of whether Duquesne receives payment from the customer, subject to the limitations set forth below. Duquesne will seek to recover the EGS receivables from EGS customers consistent with Duquesne’s existing collection procedures for recovery of billings to default service customers, and incur any uncollectible costs related to billings for EGSs. The term of the POR program defined herein will become effective June 1, 2021, and will remain in effect as described and will terminate on May 31, 2025.

(C)
(C)
(C)
(C)

12.1.7.1 ELIGIBILITY REQUIREMENTS EGSs that choose Duquesne’s consolidated billing option for all or a portion of their eligible customer accounts will be required to sell their accounts receivable to Duquesne for those customers for whom Duquesne issues a consolidated bill. (EGSs may continue to issue their own bills through Dual Billing for commodity service, for all or a portion of their customers, but will not be eligible to participate in the POR program for those customers that receive Dual Billing.) EGSs may choose to participate in the POR program with consolidated billing at any time during the term of the POR program as long as the EGS does not remove customer accounts from consolidated billing. A customer whose service is terminated or who voluntarily switches from the EGS’ service to another generation provider is not considered to have been removed by the EGS from consolidated billing and the POR program.

(C)
(C)

EGSs participating in this POR program will agree not to reject for enrollment a new customer covered by the program based on credit-related issues. Any customer who wishes to be served by an EGS participating in the POR program will be accepted by the EGS if that EGS is actively serving the rate class to which that customer belongs.

12.1.7.2 PURCHASE PRICE DISCOUNT Participating EGSs’ applicable electric commodity receivables will be purchased at a discount. The discount rate will be 0.10% for incremental, ongoing operating and administrative expenses associated with the POR Program related to these customers.

(C)

(C) – Indicates Change

Exhibit DBO- 3R

RULES AND REGULATIONS - (Continued)

12. PAYMENT AND BILLING – (Continued)

12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM Duquesne will purchase the accounts receivable, without recourse, associated with EGS sales of retail electric commodity, composed of generation and transmission services, to residential customers and commercial and industrial ("C&I") customers with monthly metered demand less than 300 kW within Duquesne's service territory. Eligible customers are those customers taking delivery service under the Company's retail tariff Rate RS, RH, RA, GS/GM and GMH, and who purchase their electric commodity requirements from the EGS through consolidated billing with the Company. Upon request, an EGS shall provide a written certification to Duquesne that the EGS is providing only basic electric supply to residential customers billed through consolidated billing with the Company. Commercial and industrial customers will be separated into two categories for purposes of the Purchase Price Discount discussed in Section 12.1.7.2. Small C&I customers will be those customers with monthly metered demand less than 25 kW and Medium C&I customers will be those customers with monthly metered demand equal to or greater than 25 kW. The classification of customers as less than or equal to or greater than 25 kW is discussed in detail in the Company's retail tariff Rate GS/GM and Rate GMH. Under the POR program, Duquesne will reimburse EGSs for their customer billings regardless of whether Duquesne receives payment from the customer, subject to the limitations set forth below. Duquesne will seek to recover the EGS receivables from EGS customers consistent with Duquesne's existing collection procedures for recovery of billings to default service customers, and incur any uncollectible costs related to billings for EGSs. The term of the POR program defined herein will become effective June 1, 2021, and will remain in effect as described and will terminate on May 31, 2025.

(C)
(C)
(C)
(C)

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(C)
(C)

EGSs participating in this POR program will agree not to reject for enrollment a new customer covered by the program based on credit-related issues. Any customer who wishes to be served by an EGS participating in the POR program will be accepted by the EGS if that EGS is actively serving the rate class to which that customer belongs.

12.1.7.2 PURCHASE PRICE DISCOUNT Participating EGSs' applicable electric commodity receivables will be purchased at a discount. The discount rate will be 0.10% for incremental, ongoing operating and administrative expenses associated with the POR Program related to these customers.

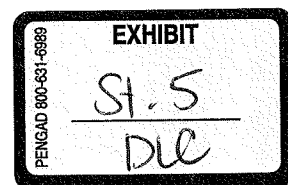
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(C) – Indicates Change

DUQUESNE LIGHT STATEMENT NO. 5

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition Of Duquesne Light :
Company For Approval Of : **Docket No. P-2020 _____**
Default Service Plan For The :
Period June 1, 2021 Through May :
31, 2025



**DIRECT TESTIMONY OF
KATHERINE M. SCHOLL**

Dated: April 20, 2020

1 **Q. Please state your full name and business address.**

2 A. My name is Katherine Scholl. My business address is 411 Seventh Avenue, Mail
3 Drop 15-1, Pittsburgh PA 15219.

4

5 **Q. What is your position at Duquesne Light Company (“Duquesne Light” or
6 “Company”)?**

7 A. I am the Director of Customer Experience.

8

9 **Q. How long have you worked at Duquesne Light?**

10 A. I have been with Duquesne Light since May 2016.

11

12 **Q. What are your current responsibilities?**

13 A. I oversee four areas within the Company’s Customer Service department: 1) Energy
14 Efficiency / Act 129 Programs; 2) Universal Services; 3) Transportation
15 Electrification; and 4) Customer Experience, which includes the design and
16 implementation of strategies to improve customer satisfaction, respond more
17 effectively to customer needs and preferences, and make interactions with
18 customers through various channels as seamless and efficient as possible.

19

20 **Q. What are your qualifications, work experience and educational background?**

21 A. I attended Duquesne University, where I graduated Magna Cum Laude with a
22 Bachelor of Science in Business Administration and also completed my Masters in
23 Business Administration with High Honors. Prior to joining Duquesne Light in

1 2016, I spent nearly ten years at Giant Eagle Inc. in Pittsburgh, where my
2 responsibilities included directing various aspects of customer relationship
3 management (“CRM”), including the design and administration of customer loyalty
4 programs, targeted marketing, and customer data analytics.

5 Prior to joining Giant Eagle, I spent seven years at Acxiom Corporation
6 providing customer acquisition and relationship management consulting services
7 to top credit card issuers in the United States and the United Kingdom.

8 Prior to joining Acxiom Corporation, I spent 6 years in various roles in
9 Consumer Lending and Credit Card management at Mellon Bank.

10

11 **Q. What is the purpose of your direct testimony?**

12 A. The purpose of my testimony is to discuss the Company’s proposals regarding its
13 Standard Offer Program (“SOP”) and Customer Assistance Program (“CAP”)
14 shopping. I also provide context regarding the Company’s proposal to implement a
15 time-of-use rate pilot for customers with electric vehicles, which is discussed in
16 further detail in Duquesne Light St. No. 4, Direct Testimony of David Ogden.

17

18 **Q. Are you sponsoring any Exhibits along with your direct testimony?**

19 A. Yes. Exhibit KMS-1 is a proposed form of CAP Notice. Exhibit KMS-2 depicts the
20 Company’s outreach and education plan for its proposed electric vehicle time-of-
21 use rate pilot. I explain both Exhibits, and their respective contexts, further herein.

22

23

1 **I. STANDARD OFFER PROGRAM**

2

3 **Q. Please provide an overview of the Company's Standard Offer Program.**

4 A. The Company's SOP was initially implemented as part of its Default Service Plan
5 VI. The SOP targets residential and small C&I customers who are not served by an
6 Electric Generation Supplier ("EGS") and who contact the Company with four
7 types of calls. Specifically, customers who contact the Company: 1) to initiate or
8 move service, 2) to discuss choice questions, 3) to resolve high bill concerns, or 4)
9 to inquire about the SOP, are provided information regarding participation in the
10 Company's SOP. After the customer's specific inquiry has been resolved,
11 Duquesne Light's customer service representative ("CSR") offers the customer the
12 opportunity to participate in the SOP utilizing an established script. When the
13 customer indicates that he/she is interested in participating in the SOP, he/she is
14 transferred to a participating EGS for program details and enrollment. Customers
15 who enroll with an EGS through SOP have the option of choosing a fixed price 7%
16 below the Company's then-effective price to compare ("PTC") for a period of 12
17 months. Customers can leave the SOP at any time during these 12 months without
18 penalty.

19

20 **Q. Please describe the results of the SOP in DSP VIII.**

21 A. The Company's current DSP VIII began June 1, 2017. From that date through
22 February 20, 2020, the Company had 7,297 residential referrals and 5,780
23 residential enrollments, for a 79% referral-to-enrollment rate. The number of EGSs

1 participating in the SOP has fluctuated somewhat during this period, with 2 to 7
2 EGSs participating in the SOP for the residential class in any given month.

3 The Company's SOP for small commercial customers has seen significantly
4 less participation. From June 1, 2017, through February 20, 2020, the Company had
5 15 small commercial referrals and 7 small commercial enrollments for a 47%
6 referral-to-enrollment rate. No EGSs participated in the small commercial SOP for
7 the first year of DSP VIII; thereafter, only 1 or 2 EGSs have participated in any
8 given month.

9
10 **Q. How is the SOP administered?**

11 A. The Company administers the SOP directly, using its own CSRs to offer the SOP
12 in calls with customers, supported by Company-supplied training and IT resources.
13 To the best of my knowledge, Duquesne Light is the only EDC in Pennsylvania
14 that directly administers its SOP. The other EDCs outsource their SOPs (or similar
15 programs) to third-party vendors.

16
17 **Q. What are the Company's costs of administering the SOP?**

18 A. The Company estimates total annual costs of administering the SOP to be
19 approximately \$62,200. This consists primarily of CSR call handling time, training,
20 and reporting.

21
22 **Q. How does the Company recover its costs of administering the SOP?**

1 A. Currently, participating EGSs pay the Company a customer acquisition fee of
2 \$10.28 per enrollment. This \$10.28 fee was established in September of 2014
3 during the Company's DSP VII, and has remained fixed at that level even as the
4 Company's call center and IT costs have increased. Based on SOP enrollment levels
5 in the DSP VIII period, the Company has recovered an average of \$21,000 annually
6 in customer acquisition fees from participating EGSs. This leaves an annual
7 shortfall of approximately \$41,200.

8

9 **Q. What would the Company's fee per enrollment need to be in order to fully**
10 **cover the costs of the SOP from EGSs?**

11 A. A total of 2,013 customers enrolled in the SOP in 2019. With a total program cost
12 of \$62,200 spread across 2,013 enrollments, the fee per enrollment would need to
13 increase to \$30.90.

14

15 **Q. How does the Company propose to modify its SOP in DSP IX?**

16 A. The Company proposes to outsource administration of the SOP to a third-party
17 vendor.

18

19 **Q. Please summarize the Company's current processes and scripting associated**
20 **with the SOP and describe how the Company proposes to modify them for**
21 **DSP IX.**

22 A. Consistent with its DSP VIII Settlement paragraph 26, the Company's CSRs read
23 the below script to customers at the conclusion of a qualifying call.

1 *I see you are eligible for the voluntary Standard Offer program.*
2 *Duquesne Light is responsible for delivering your electricity. The*
3 *actual generation of the electricity you receive can be provided by*
4 *Duquesne Light or a participating supplier of your choice. The*
5 *Standard Offer program offers a fixed price of [SOP Rate]*
6 *cents/kWh for one year provided by an Electric Generation*
7 *Supplier. The fixed Standard Offer Program price provides a 7%*
8 *discount off of today's Price to Compare which is [PTC Rate]*
9 *cents/kWh. Duquesne Light's Price to Compare changes on June*
10 *1st and December 1st each year. The Standard Offer price will not*
11 *change during the 12 monthly bills, but the Price to Compare could*
12 *be higher or lower than the Standard Offer program during this*
13 *period when it changes. If you are interested in the Standard Offer*
14 *Program, I will transfer you to a supplier who is participating for*
15 *more information. Customers who enroll are free to leave the*
16 *Standard Offer Program at any time during the 12 months and*
17 *return to Duquesne Light's default service or another EGS with no*
18 *termination/cancellation fee imposed.*

19 Customers who accept are then transferred to a participating EGS to discuss
20 potential enrollment.

21 For DSP IX, the Company proposes to adopt the SOP process and scripting
22 similar to those the Commission approved for the FirstEnergy Companies'
23 Customer Referral Program by Order entered February 28, 2019, at Docket Nos. P-
24 2017-2637855 *et. al.* ("February 28, 2019, Order"). Generally, at the conclusion of
25 a qualifying customer call, the Company CSR will offer to transfer the customer to
26 the third-party vendor. The vendor would then describe the SOP and enroll the
27 interested customer with a participating EGS.

28 Consistent with the FirstEnergy CSR SOP scripts, the Company's CSR
29 script will differ depending on the purpose of the customer's call. At the conclusion
30 of calls related to initiating or transferring service, the Company will use the
31 following "Mover/New Service Script:"
32

1 *Are you satisfied with what I have done for you today? I have*
2 *completed your order. With your permission, I will transfer you to*
3 *our vendor. They will offer you potential rate savings through our*
4 *Electric Choice Program, and help you to set up other services if*
5 *needed.*
6

7 For calls related to initiating or transferring service, the Company will use the
8 following "PTC/High Bill Calls Script:"

9 *In Pennsylvania, you can choose the company that generates your*
10 *electricity – also known as your electric supplier – without*
11 *impacting the quality of your service. Would you like to speak to a*
12 *representative who can offer you a potential rate savings by*
13 *enrolling with an alternate supplier?*

14 Where a customer elects to be transferred to the Company's third-party vendor, the
15 vendor will read the following script:

16 *[CUSTOMER NAME], there are many registered electric suppliers*
17 *doing business in the state of Pennsylvania and you have the option*
18 *of choosing any of them. In an effort to encourage choice, the State*
19 *Utility Commission has made the Standard Offer program available*
20 *to you.*

21 *The Standard Offer Program offers a fixed price of xx cents per*
22 *kilowatt hour for one year and is provided by an Electric Generation*
23 *Supplier. The fixed Standard Offer Program price provides an*
24 *initial 7% discount off today's Price to Compare, which is xx cents*
25 *per kilowatt hour. The Price to Compare will change again on the*
26 *first of June and then on the first of December. The Standard Offer*
27 *Program price will not change through twelve monthly bills but the*
28 *Price to Compare could be higher or lower than the Standard Offer*
29 *Program price during this period.*

30 *Duquesne Light is still your utility company and is responsible for*
31 *all your billing and service matters. You will continue to receive*
32 *only one bill from Duquesne Light.*

33 *You can cancel this contract at any time without penalty and select*
34 *another supplier or return to default service with Duquesne Light*
35 *for service at the Price to Compare. I can enroll you with an*
36 *approved supplier of your choice from our list or I can select one*

1 *for you. Do you have any questions? Do you agree to be enrolled*
2 *with a supplier for this program?*

3

4 **Q. How will the vendor choose a supplier for customers who do not select one**
5 **themselves?**

6 A. The vendor will use its proprietary software to randomly select a participating SOP
7 supplier for customers who do not have a supplier preference. The technology uses
8 a Round Robin methodology which enables the enrollments to be distributed evenly
9 amongst the participating suppliers. A daily provisioning file is uploaded directly
10 to each supplier's SFTP site with referrals made to opt in to the Standard Offer
11 Program.

12

13 **Q. Why is the Company proposing these changes to the SOP?**

14 A. The Company is proposing these changes for several reasons. First, the Company
15 projects that outsourcing the SOP will increase customer participation by increasing
16 referral rates and potentially also referral-to-enrollment rates. For example, in 2019,
17 8% of residential Duquesne Light customers with a qualifying inquiry accepted
18 referral to an EGS participating in the SOP. Of those customers who accepted
19 referral, 81% enrolled, for a total of 2,013 residential enrollments. By comparison,
20 the FirstEnergy Companies' 2019 SOP statistics filed with the Commission indicate
21 a residential referral rate of 41% and a referral-to-enrollment rate of 92%. These
22 referral and referral-to-enrollment rates, if applied to Duquesne Light's qualifying
23 inquiries in 2019, would yield up to 12,000 residential enrollments – an increase of
24 approximately 500%. Please note that these figures are presented for comparison

1 purposes. Duquesne Light's proposed SOP modifications will likely not yield this
2 degree of increased enrollment initially; implementing the modifications will take
3 time and customer interest in the SOP is ultimately outside of the Company's
4 control.

5 The disparity in referral rates between the Company's SOP and the
6 FirstEnergy Companies' may be due to many factors. Duquesne Light posits that
7 the FirstEnergy Companies' much shorter referral scripts may play a significant
8 role. Duquesne Light's present prescribed script discusses matters relating to
9 referral, SOP terms, and enrollment. This script may be lengthy enough to lose the
10 interest of some customers who would otherwise accept a referral. Breaking up
11 roles and associated scripts between the Company (regarding referral) and the
12 vendor (regarding SOP terms and enrollment), as the FirstEnergy Companies have
13 and as the Company proposes here, may help hold the attention of potentially-
14 interested customers.

15 Second, outsourcing the SOP will better reflect the distinction in functions
16 between the Company and EGSs. Customers who already have difficulty
17 understanding the retail electric supply marketplace may be further confused by a
18 Company CSR marketing supply products on behalf of EGSs. A non-Company
19 vendor represents a more logical "fit" for that role. Similarly, outsourcing the SOP
20 would allow the Company's CSRs to focus on those customer issues that are more
21 directly under the Company's control. Whereas the Company's CSRs are primarily
22 focused on matters pertaining to outages, billing and payment, start or transfer

1 services, etc., the vendor's CSRs are highly skilled and experienced in engaging the
2 customer in a dialogue about SOP.

3 Third, the proposed SOP will align with those of other Pennsylvania EDCs,
4 particularly with those of the Company's immediate neighbors. This will promote
5 consistency for customers who move addresses within the Western Pennsylvania
6 region, as well as for the EGSs serving the region.

7 Finally, in order to achieve break-even with the current number of
8 enrollments and associated program costs if the Company were to continue to
9 administer the SOP internally, the Company would need to raise the fee per
10 enrollment to \$30.90. Outsourcing to a third-party should yield additional
11 enrollments for the suppliers at cost that is slightly less than the Company's costs
12 of administering the program.

13
14 **Q. How will the costs of this modified SOP be recovered?**

15 A. The Company will be invoiced by the third-party vendor at a cost of \$30 per
16 enrollment and will then pass through its costs to participating suppliers at that same
17 rate of \$30 per enrollment.

18
19 **Q. How will the Company identify and retain a third-party SOP vendor?**

20 A. The Company proposes to initially contract with AllConnect as its third-party SOP
21 vendor. The Company already has a relationship with AllConnect to connect new
22 service applicants with additional related services, including cable, internet and
23 phone service, and renter's insurance. In the current call flow for new service

1 requests, the Company CSR completes the start/transfer work and then reads the
2 SOP script. Customers who are interested in SOP are then transferred to an SOP
3 supplier, and those who are not interested are read a script about AllConnect and
4 given the opportunity to be transferred to an AllConnect agent.

5 Given this existing relationship with AllConnect, the technology required
6 to transfer the call and associated data for SOP is already in place and would
7 facilitate a low-cost and quick transition, with minor work to be conducted to
8 expand the qualified audience to include small C&I customers who are eligible for
9 SOP. AllConnect already works with several Pennsylvania EDCs and is very
10 familiar with SOP – having taken over 700,000 referrals across the Commonwealth
11 to date.

12
13 **II. CAP SHOPPING**

14
15 **Q. What is the Company's Customer Assistance Program?**

16 **A.** Pursuant to applicable requirements in the Public Utility Code, the Company's CAP
17 provides discounted electric bills, an opportunity for arrears forgiveness, and
18 energy efficiency assistance to participating customers with household incomes at
19 or below 150% of the federal poverty guidelines. The Company's current CAP
20 provides customers with a discount off their monthly budget bill ("percent of
21 budget plan"), up to a maximum annual discount, depending on the customer's
22 household income tier and electric heating status. Approximately 36,000 customers
23 currently participate in CAP.

1 Consistent with Commission *Order on Reconsideration* entered April 19,
2 2018, at Docket No. M-2016-2534323, beginning in 2020, the Company will
3 transition CAP to a Percent of Income Payment Plan (“PIPP”). Customers’
4 payments under the PIPP will be based primarily on their household income,
5 subject to maximum annual discount limits that vary based on the customer’s
6 household income tier and electric heating status. Under the PIPP, a customer’s bill
7 in any given month will be the lesser of (1) a percentage of the customer’s gross
8 household income (“PIPP amount”); (2) the customer’s average monthly bill; or (3)
9 the customer’s monthly bill if based on actual usage at full tariffed rates.

10

11 **Q. Are customers participating in CAP currently eligible to shop for their electric**
12 **supply?**

13 A. No. CAP customers are presently required to receive their electric supply via the
14 Company’s default service offerings.

15

16 **Q. Does the parties’ Joint Petition for Settlement in the Company’s prior default**
17 **service proceeding address CAP shopping?**

18 A. Yes. Paragraph 25 of the Joint Petition provides,

19

20 Duquesne Light will conduct a CAP shopping collaborative in the
21 fall of 2018 and file for approval of a CAP shopping program to
22 become effective June 1, 2021, provided that other EDCs CAP
23 shopping programs have been approved by the Commission and
24 have been successfully implemented.

25

26 **Q. What does the Company propose regarding CAP shopping in DSP IX?**

1 A. Consistent with the DSP VIII Joint Petition, the Company proposes to allow CAP
2 customers to shop in DSP IX, subject to restrictions on the EGS products available
3 to CAP customers.

4
5 **Q. Please describe the Commission guidance regarding development and
6 characteristics of an EDC CAP shopping program.**

7 A. The Commission described CAP shopping guidelines in its *Proposed Policy
8 Statement Order*, entered on February 28, 2019, at Docket No. M-2018-3006578.
9 Those guidelines provide that a CAP shopping plan should include: (1) a CAP
10 shopping product rate at or below the EDC's Price-to-Compare ("PTC") for the
11 duration of the contract; (2) a prohibition in EGS-CAP customer contracts against
12 fees unrelated to the provision of electric generation service, including early
13 termination and cancellation fees; and the following options for CAP customers
14 upon expiration of the current contract period: enter into another contract with their
15 existing EGS with the same CAP protections, switch to another supplier offering a
16 contract with the same CAP protections, or return to default service.¹

17
18 **Q. Does the Company's CAP shopping proposal conform to these guidelines?**

19 A. Yes.

20
21 **Q. Please describe the Company's CAP shopping proposal.**

¹ Proposed Policy Statement Order, pp. 5, 9-10.

1 A. Under the Company's proposed CAP shopping program ("Program"), participating
2 EGSs must charge CAP customers a rate at or below the applicable residential PTC
3 throughout the duration of the contract. EGSs must use "rate-ready" consolidated
4 EDC billing for all contracts with CAP customers. Any EDI transactions to enroll
5 a CAP customer at a rate above the PTC, or into a non-rate-ready product, will be
6 rejected. If at any time the EGS's rate charged to a CAP customer would exceed
7 the Company's applicable residential PTC, the customer would be automatically
8 unenrolled from the EGS and returned to default service within three business days.

9 EGSs' contracts with CAP customers also may not include early
10 cancellation or termination fees, or fees for anything unrelated to electric supply
11 service. At the expiration of a CAP customer's contract with an EGS, the customer
12 may renew the contract with his or her existing EGS at a new Program-compliant
13 rate, switch to another supplier offering a Program-compliant rate, or return to
14 default service. Where an EGS seeks to enter into a new contract or revise an
15 existing contract with a CAP customer, it must comply with the Commission's
16 notice regulations at 52 Pa. Code § 54.10. Where an EGS elects to return a CAP
17 customer to default service upon contract expiration or cancellation, the contract
18 cancellation and notice provisions described in the EGS's disclosure statement will
19 apply. If the EGS disclosure does not address cancellation and notices, the EGS
20 must provide at least one notice fifteen days in advance of discontinuing service to
21 the customer.

22

1 **Q. How will an EGS identify a customer's CAP status, for the purposes of**
2 **tailoring the products offered to the customer?**

3 A. The Company will include a field on the Eligible Customer List ("ECL") that
4 indicates whether a customer is enrolled in CAP. Additionally, upon receiving an
5 enrollment request from an EGS, the Company will include a CAP indicator in the
6 814 Enrollment response.

7
8 **Q. How will the Company's PTC filing schedule accommodate EGS compliance**
9 **with the rate restrictions applicable to CAP customers?**

10 A. As Mr. Ogden discusses in his direct testimony (Duquesne Light St. No. 4), the
11 Company updates its residential PTCs on June 1 and December 1 of each year. The
12 Company files estimated updated PTCs sixty days prior to their effective dates (i.e.,
13 by April 1 and October 1, respectively), which will allow EGSs to begin developing
14 Program-compliant rates. The Company files final PTCs, and posts them to its
15 customer-choice.com website, at least fifteen days prior to their effective dates (i.e.,
16 by May 15 and November 15, respectively).

17
18 **Q. How will the Company ensure that EGS products marketed to CAP customers**
19 **do not include cancellation or early termination fees?**

20 A. The Company has limited ability to enforce this requirement. The Company is not
21 privy to contracts between EGSs and their customers, and will not know when
22 cancellation fees are billed directly to CAP customers by EGSs.

23

1 **Q. In that case, how does the Company propose to enhance transparency around**
2 **CAP shopping?**

3 A. The Company proposes to require any EGS that wishes to participate in CAP
4 shopping to annually execute an affidavit “CAP Notice,” by which the EGS will
5 affirm that (1) it intends to market to, and enroll, CAP customers (though it will not
6 be obligated to do so); and (2) it understands and will comply with all requirements
7 of the Program. A proposed CAP Notice is included as Exhibit KMS-1. By May 20
8 of each DSP IX plan year in which the EGS intends to participate in CAP shopping,
9 the EGS will be required to file an affidavit CAP Notice with the Commission and
10 serve a copy on the Company.

11 This notice requirement is similar to EGSs’ regulatory obligation to notify
12 the Company and the Commission’s Bureau of Consumer Services prior to
13 engaging in door-to-door sales. This requirement will help the Company identify
14 noncompliant supplier practices and respond to customer inquiries. It will also
15 allow the Company and the Commission to better monitor the level of EGS
16 participation in CAP shopping. This affidavit requirement would impose no new
17 substantive obligations, and only minimal administrative burden, on EGSs.

18

19 **Q. How will the Company’s transition to a PIPP CAP plan affect CAP shopping?**

20 A. The Company’s transition to a PIPP may reduce participating customers’ incentive
21 to shop for lower supply rates, because supply rates will have less impact on the
22 customers’ bills. The Company anticipates that for most CAP customers, the PIPP
23 amount will usually yield the lowest payment of the three potential calculations of

1 a customer's bill in any given month. Most CAP customers' bills will therefore not
2 be affected by the customer's electric consumption or the nominal price of electric
3 supply. Those factors will only impact the bills of high-usage customers, insofar as
4 they influence if or when the customer reaches their annual maximum discount;
5 and low-usage customers, insofar as they influence which of the customer's PIPP
6 amount, average monthly bill, or actual bill yields the lowest payment amount.
7

8 **Q. How does the Company propose to handle the transition of customers with**
9 **existing EGS relationships when they enroll in CAP?**

10 A. Non-CAP customers served under a fixed duration contract who subsequently
11 enroll in CAP may remain with their EGS until the expiration of the fixed duration
12 contract or the contract is terminated, whichever comes first. Upon expiration or
13 termination of a pre-existing fixed duration contract, the EGS must either: (a) enroll
14 the CAP customer under a contract compliant with the new CAP shopping rules; or
15 (b) return the CAP customer to default service. For EGSs serving non-CAP
16 customers under a month-to-month contract who subsequently enroll in CAP, the
17 EGS must either, within 120 days of the customer's CAP enrollment: (a) return the
18 CAP customer to default service or (b) enroll the CAP customer under a contract
19 compliant with CAP shopping rules.
20

21 **Q. Will the CAP Shopping Program require upgrades to the Company's**
22 **customer care and billing ("CC&B") or other informational systems?**

1 A. Yes, the Company will need to make several modifications to its billing system to
2 support this program:

3 First, the Company will need to design and build the technology to check
4 all residential EGS enrollments to ensure that if the customer is in CAP, the rate is
5 not above the PTC.

6 Second, the Company will need to develop a monitor to ensure that CAP
7 customers' rates never rise above the PTC, and to unenroll the customer from the
8 EGS if the price rises above the PTC.

9 Third, the Company will need to make modifications to the ECL and the
10 814 Enrollment/Change files to ensure that EGSs remain informed of which
11 customers are enrolled in CAP.

12 Fourth, the Company will need to develop appropriate communications
13 (letters, bill messages, etc.) to inform CAP customers of any changes to their EGS
14 relationship as a result of EGS or PTC price changes.

15 Lastly, the Company will need to develop the technology to handle existing
16 non-CAP EGS customers who enroll in CAP, including notification to the EGS of
17 the customer's enrollment and monitoring to ensure that appropriate actions are
18 taken by the supplier to ensure that the customer is either given a rate lower than
19 the PTC or returned to default service.

20 The Company estimates the costs of these upgrades at approximately
21 \$160,000. Of this, approximately \$120,000 reflects capital costs that will be
22 included in rate base and addressed in a future base distribution rates proceeding.
23 The Company proposes to recover the remaining \$40,000 of expense through its

1 Universal Services Charge, at Rider No. 5 of its Retail Tariff. As Mr. Ogden notes
2 in his testimony, the Company proposes to modify the USC to incorporate this cost
3 recovery in a future compliance filing upon Commission approval of the program.

4 In light of these costs, the Company will only begin the process of
5 implementing the Program upon receipt of executed CAP Notice affidavits from at
6 least five EGSs. As I discussed above, an EGS's execution of a CAP Notice
7 affidavit does not obligate it to offer products to CAP customers; this requirement
8 is instead intended to ensure ample EGS interest in the Program before the
9 Company expends customer funds to implement it.

10
11 **III. ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM**

12
13 **Q. Please summarize the Company's proposal to implement a time-of-use supply
14 rate pilot program for customers with electric vehicles.**

15 **A.** As Mr. Ogden describes in his direct testimony, the Company proposes to pilot an
16 optional time-of-use supply rate to Residential,² Small C&I,³ and Medium C&I <
17 200kW⁴ customers eligible for Rider No. 8 who own or lease a plug-in battery
18 electric vehicle or a plug-in hybrid electric vehicle (collectively "EV") or offer
19 charging infrastructure to employees or visitors. The EV-TOU Rate will provide
20 for time-varying prices for electric supply delivered during "on-peak," "shoulder,"

² Residential customers are those served under rate schedules RS, RH and RA.

³ Small C&I customers are those with average monthly metered demands less than 25 kW served under rate schedules GS/GM, GMH and UMS.

⁴ Medium C&I <200kW customers are those served under rate schedules GS/GM and GMH with average monthly metered demands that are at least 25 kW but less than 200kW.

1 and “off-peak” periods. The EV-TOU Rate is a “whole premises” rate, i.e., it will
2 apply to all electric load behind a given meter.

3
4 **Q. Why is the Company proposing an EV-TOU Pilot Program?**

5 A. The Company is proposing an EV-TOU Pilot Program because it provides
6 environmental, economic, and operational benefits for customers and for the
7 Company. The Pennsylvania Public Utility Commission (“PUC”) has encouraged
8 EDCs to adopt EV-TOU rates. A recently released Secretarial Letter regarding the
9 Investigation into Default Service and PJM Interconnection, LLC. Settlement
10 Reforms, entered January 23, 2020, at Docket M-2019-3007101 states: “We urge
11 all parties participating in the upcoming DSP proceedings to consider how EV
12 specific TOU rate offerings could be made available to consumers.”

13 EVs are an ideal flexible load since they are parked the majority of the time
14 and can be easily programmed to begin charging at pre-defined times. A report by
15 the Smart Electric Power Alliance (SEPA) affirmed that time-varying rates are an
16 effective behavioral tool to encourage customers to shift EV charging to off-peak
17 times.⁵ As the number of EVs registered in the Company’s territory grows from
18 over 3,000 EVs today to an estimated 18,500 EVs by the end of 2025, the electric
19 load associated with EVs is expected to grow. As this load expands, the Company
20 wants to optimize existing grid and generation capacity by shifting EV charging to
21 off-peak times. The Company anticipates that flattening the growing EV load may

⁵ Residential Electric Vehicle Rates That Work. Smart Electric Power Alliance. November 2019.

1 also help reduce the need for additional distribution upgrades, which benefits all
2 distribution customers, not only those on the EV-TOU rate.

3 By offering lower supply rates during the off-peak period, when underlying
4 electricity supply costs are generally lower, the EV-TOU Pilot Program is designed
5 to reduce the cost to customers by encouraging them to shift their charging time.
6 This shift can benefit all customers by decreasing the proportion of higher-priced,
7 on-peak energy needed to serve default service customers.

8 Electric vehicles also have environmental and economic benefits that can
9 help the Company's customers. As of 2017, the transportation sector accounted for
10 the largest share of greenhouse gas ("GHG") emissions generated in the United
11 States.⁶ Greater adoption of EVs can help reduce GHG emissions since EVs
12 charging up in Pennsylvania are estimated to emit one-third of the GHG emissions
13 of gasoline-fueled vehicles and produce zero tailpipe emissions helping to improve
14 local air quality.⁷

15 Due to the greater fuel efficiency and lower maintenance requirements of
16 EVs, drivers who switch to EVs from gasoline-powered vehicles will save on
17 maintenance and fuel costs over the lifetime of their vehicles, producing economic
18 benefits for drivers and companies deploying EVs in their fleets.

19 The EV-TOU rate is another mechanism to encourage EV adoption by
20 helping to lower the total cost of ownership for EV drivers, especially for fleets
21 where total cost of ownership is a major consideration. Cost continues to be a

⁶ U.S. Environmental Protection Agency. Sources of Greenhouse Gas Emissions.
<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

⁷ U.S. Department of Energy. Alternative Fuels Data Center. Emissions from Hybrid and Plug-in Electric Vehicles. https://afdc.energy.gov/vehicles/electric_emissions.html.

1 barrier to more wide-spread EV adoption, and by providing more rate flexibility,
2 the Company aims to give customers additional tools to lower their costs of EV
3 fueling.

4
5 **Q. Why propose a whole-premise EV-TOU rate?**

6 A. The Company is proposing that the EV-TOU rate would apply to customers' total
7 usage. A whole-premise approach is the simplest, most cost effective, and quickest
8 way to encourage EV-TOU Pilot Program enrollment. Two-thirds of the utilities
9 surveyed by SEPA reported offering an EV-TOU rate using the house meter and
10 did not require any additional metering for enrollment for residential customers.⁸

11 The Company will monitor customer response to the EV-TOU Pilot
12 Program and will continue to evaluate technology options for potential future
13 deployment.

14
15 **Q. What is the EV-TOU schedule?**

16 A. The Company's proposed EV-TOU schedule is defined in the table below. This
17 schedule applies year-round, seven-days-a-week, including holidays and is the
18 same for all eligible customer classes.

19
20 **EV-TOU Schedule**

Schedule	Time Period
Peak	1pm-9pm
Shoulder	6am-1pm; 9pm-11pm
Off-Peak	11pm-6am

21
22
23
24

⁸ Residential Electric Vehicle Rates That Work. Smart Electric Power Alliance. November 2019.

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22

Q. Who is eligible for the EV-TOU Pilot Program?

A. Residential, Small C&I and Medium C&I <200kW customers eligible for Rider 8 – Default Service Supply who own or lease an EV or charging infrastructure that charges an EV at the customer’s premise are eligible for the EV-TOU Pilot Program. Customers eligible for Rider 9 – Day-Ahead Hourly Price Service are not eligible for the EV-TOU Pilot Program and they will not bear any of the costs associated with the EV-TOU Pilot Program.⁹

Customers must have a valid e-mail address to ensure that the Company can provide EV-TOU customers with regularly and timely communications regarding their savings performance. The EV-TOU Pilot Program is not available to customers with a conventional, charge sustaining (battery recharged solely from the vehicle’s on-board generator) hybrid electric vehicle (HEV). Low speed electric vehicles and electrically powered motorcycles or bicycles are not eligible for this rate option.

Customers will not be eligible for the EV-TOU Pilot Program if they participate in the Company’s CAP, virtual meter aggregation, or budget billing programs. The Company is proposing to exclude CAP customers since they may not have the flexibility to shift their load outside of the higher-priced peak period and this could create the risk of higher generation charges on customer’s electric bills. The Company is proposing to exclude virtual meter aggregation customers due to the administrative complexities of managing billing for these groups. The

⁹ Unmetered accounts on Rider No. 8 also are not eligible for EV-TOU rates.

1 Company is proposing to exclude budget billing customers due to administrative
2 complexities and because budget billing would “smooth out” the price signals sent
3 by the TOU rate, which may dilute its effectiveness in incenting customer load-
4 shifting.

5 Within these parameters, all customers who own an EV are eligible to
6 participate in the EV-TOU Pilot Program regardless of whether they are currently
7 being served through the default service offering or through an existing EGS.

8

9 **Q. How will customers enroll in the EV-TOU Pilot Program?**

10 A. To enroll in the EV-TOU Pilot Program, customers must complete an EV-TOU
11 enrollment and provide a copy of their electric vehicle registration or related
12 documentation. For residential customers, in order to enroll, the vehicle registration
13 must have the same address as the address associated with the account.

14 If a customer moves during the course of the DSP period, the customer will
15 remain enrolled in the EV-TOU Pilot Program unless they direct otherwise.

16

17 **Q. Will annual recertification be required to remain enrolled in the EV-TOU
18 Pilot Program?**

19 A. Annual recertification will not be required. Once customers have signed up for the
20 rate and provided appropriate documentation, they will not be required to provide
21 documentation again during the DSP IX period.

22

1 **Q. Will customers participating in the EV-TOU Pilot Program be able to switch**
2 **to default service fixed rate or select an EGS?**

3 A. Customers may opt to switch to an EGS or default service fixed rate at any time.
4 However, EV-TOU customers leaving the EV-TOU Pilot Program will be
5 prohibited from re-enrolling in the EV-TOU Pilot Program for twelve billing
6 months after switching off the EV-TOU Pilot Program. Having this provision in
7 place will help reduce customers' abilities to game rates.

8

9 **Q. What is expected enrollment for the EV-TOU Pilot Program?**

10 A. Based on the experiences of other electric utilities and the Company's plans to
11 actively promote the EV-TOU Pilot Program, the Company anticipates residential
12 enrollment of about 15% of EV-driving customers in the first year with gradual
13 increase to around 25% over the 4-year period as awareness of the EV-TOU Pilot
14 Program grows and more customers become interested.

15 Auto manufacturers are heavily investing in the EV space and consumer
16 adoption is expected to grow as more options come to market, especially in popular
17 vehicle categories like cross-over SUVs and pick-up trucks. Additionally, EV costs
18 are expected to fall and become more cost competitive with gas vehicles as EV
19 production grows in scale and component costs, like batteries, decrease in price.

20 Other utilities that have offered a similar EV-TOU rate and marketed it to
21 customers have seen average enrollments of around 25%.¹⁰ The table below

¹⁰ Residential Electric Vehicle Rates That Work. Smart Electric Power Alliance. November 2019.

1 estimates the total number of accounts enrolled at the end of each DSP year (June-
2 May):

3
4 **Estimated EV-TOU Pilot Program Enrollment***

Year	EV Registered in Duquesne Light Service Territory	Enrollment %	EV TOU Rate Enrollment
2021-22	6,377	15%	957
2022-23	8,715	20%	1,743
2023-24	11,944	22%	2,628
2024-25	16,125	25%	4,031

5 *EV Registration projections based on Electric Power Research Institute median
6 EV adoption projections for the Company's service territory. The years in the table
7 above span June 1 to May 31.

8
9 The Company expects a much smaller proportion of small and medium C&I
10 customers to enroll in the EV-TOU Pilot Program, but the Company will be
11 targeting customers with larger fleets and workplace charging installations for
12 enrollment.

13
14 **Q. Will the Company conduct education and outreach to inform customers about
15 the EV-TOU Pilot Program?**

16 **A.** Yes, the Company plans to conduct education and outreach to inform customers
17 about the EV-TOU Pilot Program. A study by SEPA found that utilities that
18 marketed their EV-TOU rate had enrollment three times that of utilities that did not
19 actively market and educate customers about their EV-TOU offering.¹¹

¹¹ *Id.*

1 Exhibit KMS-2 displays the proposed customer education budget for the
2 EV-TOU Pilot Program. Mr. Ogden addresses the recovery of these costs in his
3 direct testimony, Duquesne Light St. No. 4.

4
5 **Q. How will the Company make customers aware of and keep them informed**
6 **about the EV-TOU Pilot Program?**

7 A. The Company will provide educational tools and resources through a variety of
8 channels to help customers select the rate that works best for them. The Company
9 will post information about the EV-TOU Pilot Program and enrollment on its
10 website, on its Electric Vehicles page and in the Retail Tariff. The Company will
11 also include a tool on its website that will enable customers to compare default
12 service supply rate options and will offer suggestions for shifting EV and other
13 energy usage.

14 For customers who have previously claimed the \$60 EV Bill Credit, the
15 Company will email customers to make them aware of the EV-TOU rate, available
16 resources, and then enrollment process.

17 On an annual basis, the Company will add a notice to its online bill and
18 include printed bill inserts. Periodically, the Company will run social media posts
19 and digital advertisements to promote the rate option. When the Company holds
20 EV-related events, including ride-and-drives, it will provide information to
21 customers about the EV-TOU Pilot Program. The Company will also coordinate
22 with local stakeholder groups to disseminate information about the EV-TOU Pilot
23 Program, including local auto dealerships and non-profit partners.

1 Once customers are enrolled in the rate, they will receive regular email
2 communications about their EV-TOU performance.

3

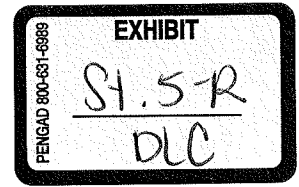
4 **Q** **Does this conclude your direct testimony?**

5 **A.** Yes, it does.

DUQUESNE LIGHT STATEMENT NO. 5-R

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition Of Duquesne Light : **Docket No. P-2020-3019522**
Company For Approval Of :
Default Service Plan For The :
Period June 1, 2021 Through May :
31, 2025



**REBUTTAL TESTIMONY OF
KATHERINE M. SCHOLL**

Dated: August 14, 2020

1 **Q. Please state your full name and business address.**

2 A. My name is Katherine Scholl. My business address is 411 Seventh Avenue, Mail
3 Drop 15-1, Pittsburgh PA 15219.

4

5 **Q. What is your position at Duquesne Light Company (“Duquesne Light” or
6 “Company”)?**

7 A. I am the Director of Customer Experience.

8

9 **Q. How long have you worked at Duquesne Light?**

10 A. I have been with Duquesne Light since May 2016.

11

12 **Q. What are your current responsibilities?**

13 A. I oversee four areas within the Company’s Customer Service department: 1) Energy
14 Efficiency / Act 129 Programs; 2) Universal Services; 3) Transportation
15 Electrification; and 4) Customer Experience, which includes the design and
16 implementation of strategies to improve customer satisfaction, respond more
17 effectively to customer needs and preferences, and make interactions with
18 customers through various channels as seamless and efficient as possible.

19

20 **Q. What are your qualifications, work experience and educational background?**

1 A. I attended Duquesne University, where I graduated Magna Cum Laude with a
2 Bachelor of Science in Business Administration and also completed my Masters in
3 Business Administration with High Honors. Prior to joining Duquesne Light in
4 2016, I spent nearly ten years at Giant Eagle Inc. in Pittsburgh, where my
5 responsibilities included directing various aspects of customer relationship
6 management (“CRM”), including the design and administration of customer loyalty
7 programs, targeted marketing, and customer data analytics.

8 Prior to joining Giant Eagle, I spent seven years at Acxiom Corporation
9 providing customer acquisition and relationship management consulting services
10 to top credit card issuers in the United States and the United Kingdom.

11 Prior to joining Acxiom Corporation, I spent 6 years in various roles in
12 Consumer Lending and Credit Card management at Mellon Bank.

13

14 **Q. Did you previously submit testimony in this proceeding on behalf of Duquesne**
15 **Light Company?**

16 A. Yes, I submitted direct testimony (Duquesne Light Statement No. 5) on April 20,
17 2020 with the Company’s filing.

18

19 **Q. What is the purpose of your Rebuttal Testimony?**

20 A. My rebuttal testimony responds to assertions of witnesses on the following topics:

21 1. Changes to the Company’s Standard Offer Program (“SOP”);

- 1 2. A program to allow customers participating in the Company's Customer
2 Assistance Program ("CAP") to enroll with an Electric Generation Supplier
3 ("EGS"), i.e., CAP Shopping;
- 4 3. The Company's proposed electric vehicle time of use rate pilot ("EV-TOU Pilot
5 Program"); and
- 6 4. Mr. Geller's recommendations regarding the Company's residential bill design
7 and bill-ready EGS billing procedures.

8

9 **Q. Are you sponsoring any Exhibits along with your Rebuttal Testimony?**

10 A. Yes. I am sponsoring Exhibit KMS-1R, comprising responses of EGS Parties
11 witness Christopher Kallaher to discovery questions in this proceeding, and Exhibit
12 KMS-2R, comprising my responses to certain discovery questions of other parties
13 in this proceeding.

14

15 **I. STANDARD OFFER PROGRAM**

16 **Q. Before addressing other parties' comments regarding the SOP, do you have
17 any corrections or clarifications to your direct testimony concerning the SOP?**

18 A. Yes. First, due to a clerical error, the SOP referral and enrollment data I presented
19 at page 3, lines 21-23 of my direct testimony were incorrect. The correct data are
20 as follows:

21 From that date through February ~~20~~ 29, 2020, the Company
22 had ~~7,297~~ 7,479 residential referrals and ~~5,780~~ 5,504

1 residential enrollments, for a ~~79%~~ 74% referral-to-
2 enrollment rate.

3
4 These corrections have no impact on my conclusions or recommendations
5 presented in my direct testimony.

6 Second, page 10, lines 14-17 of my direct testimony mistakenly stated that
7 the Company proposed to assess a \$30 per-enrollment fee on suppliers participating
8 in the SOP. As I pointed out in my response to [DR] and discuss further in my
9 testimony, the Company is proposing to assess this fee on a per-referral, not per-
10 enrollment, basis.

11 Third, as I noted in my response to OCA-I-10, based on further discussion
12 with Allconnect following development of my direct testimony, I am proposing a
13 slightly different SOP referral script than that included at page 7, line 16 – page 8,
14 line 2 of my direct testimony. This proposed script is included as part of Exhibit
15 KMS-2R.

16
17 **Q. Please describe other parties' recommendations regarding the SOP to which**
18 **you are responding.**

19 **A.** I am responding to comments in the direct testimonies of OCA witness Barbara
20 Alexander (OCA Statement No. 2) and CAUSE-PA witness Harry Geller (CAUSE-
21 PA Statement No. 1) regarding the Company's current SOP program and its
22 proposal to obtain a third-party vendor to administer its SOP. I note that Company
23 witness Scott Fisher also addresses the SOP in his rebuttal testimony (DLC

1 Statement No. 3-R), specifically to address EGS Parties' witness Christopher
2 Kallaher's recommendation that Duquesne Light revise the Standard Offer
3 Program to require new or moving customers calling to initiate service to choose
4 only an EGS service option rather than default service.

5
6 **Q. Please summarize Ms. Alexander's concerns regarding the Company's**
7 **proposal to conduct SOP through a third-party vendor.**

8 A. Ms. Alexander raises a concern that the Company's proposal may increase costs on
9 customers. She asserts that the Company's current process, including the fee of
10 \$10.28 charged to suppliers for each enrollment, achieves acceptable results and
11 fully recovers the Company's costs. Ms. Alexander opines that the Company has
12 not justified its proposal to outsource the SOP in light of its alleged potential for
13 higher customer costs, stating, "I do not recommend that ratepayers incur additional
14 costs for the SOP, particularly because there is no documented evidence that DLC's
15 current SOP is in need of reform."¹ Ms. Alexander recommends that the Company
16 conduct further research and analysis into the SOP, including customer research to
17 better understand customer understanding of and sentiment toward SOP, and an
18 analysis of rates paid by SOP participants following their initial 12-month
19 introductory period with their EGS.

20

¹ OCA St. No. 2, p. 14, lines 13-15.

1 **Q. Does Ms. Alexander accurately characterize the Company's current or**
2 **proposed SOPs?**

3 A. No. Ms. Alexander's direct testimony on this topic appears to rely on fundamental
4 factual inaccuracies regarding the Company's current SOP and its proposed
5 changes thereto. Her recommendations should therefore be rejected.

6
7 **Q. Ms. Alexander suggests that the Company currently recovers all of its costs of**
8 **administering the SOP through the \$10.28 per-enrollment fee on participating**
9 **EGSs. (OCA St. No. 2, p. 3, lines 17-20). Is this correct?**

10 A. No. The \$10.28 per-enrollment fee does not cover the Company's costs of
11 administering the SOP. As I pointed out in my direct testimony,² this fee was
12 established in the Company's DSP VII, and has been in place for at least six years.
13 It has never been adjusted for increases to salaries or other costs, or to account for
14 customers' actual enrollment rates. As I presented in my direct testimony, the
15 Company recently conducted an analysis to determine its actual costs of
16 administering the SOP, and determined its actual annual costs to be approximately
17 \$62,000 – well in excess of the approximately \$21,000 it recovers from EGSs
18 through the \$10.28 per-enrollment fee.³ This shortfall is attributable to (1) increases
19 in the Company's costs since implementing the \$10.28 fee in 2014, and (2) the high
20 percentage of calls for which the Company reads the SOP script (thereby incurring
21 costs), but which do not result in SOP enrollment (and therefore do not result in

² DLC St. No. 5, p. 5, lines 1-7.

³ DLC St. No. 5, p. 5, lines 1-7.

1 payment of a \$10.28 fee). Thus, contrary to Ms. Alexander's suggestion, the
2 Company is not recovering its costs of administering the SOP through the \$10.28
3 per-enrollment fee charged to participating suppliers.
4

5 **Q. What per-enrollment fee would the Company need to charge in order to**
6 **recover its costs of administering the SOP in-house?**

7 A. As I indicated in my direct testimony,⁴ based on the Company's current costs and
8 SOP enrollment rates, the Company would need to charge participating EGSs a fee
9 of approximately \$30.90 per enrollment to recover its internal costs of
10 administering the SOP.
11

12 **Q. Ms. Alexander states, "DLC does not propose to change this fee,"⁵ i.e., the**
13 **current fee of \$10.28 per SOP enrollment assessed on participating EGSs. She**
14 **further asserts that the Company "did not discuss the potential for increased**
15 **costs of" its proposal to outsource SOP administration to a third-party**
16 **vendor.⁶ Is she correct?**

17 A. No. The Company proposes to change the \$10.28 fee to a \$30 fee. As I discussed
18 at page 10, lines 14-17 of my direct testimony, the Company proposes to implement
19 a \$30 fee to recover the costs of its proposed modified SOP:

⁴ DLC St. No. 5, p. 5, lines 11-13.

⁵ OCA St. No. 2, p. 3, lines 19-20.

1 **Q. How will the costs of this modified SOP be**
2 **recovered?**

3 A. The Company will be invoiced by the third-party
4 vendor at a cost of \$30 per enrollment and will then pass
5 through its costs to participating suppliers at that same rate
6 of \$30 per enrollment.

7
8 I subsequently clarified in my response to OCA-II-9 that this \$30 fee would
9 be assessed on participating EGSs on a per-referral, not per-enrollment, basis.
10 Assessing the fee on a per-referral basis is preferable because it links cost recovery
11 more directly to cost incurrence. The costs of administering the SOP are primarily
12 associated with referrals, not enrollments; thus, a per-enrollment fee is vulnerable
13 to over- or under-collecting costs because it relies on a fixed estimated referral-to-
14 enrollment rate. This has contributed to the inadequacy of the Company's current
15 \$10.28 per-enrollment fee, as I discussed above, and further evidences the
16 Company's careful consideration of the relative costs of its SOP proposal versus its
17 current SOP administration.

18 Further, despite erroneously accusing the Company of not considering the
19 costs of its proposal, Ms. Alexander did not consider the cost implications of her
20 recommendation. As I discussed above and in my direct testimony, if the Company
21 were to continue administering the SOP in-house, as Ms. Alexander recommends,
22 it would need to charge a per-enrollment fee of \$30.90. Ms. Alexander fails to
23 consider this prospect.

24
25 **Q. Will the Company's proposal to outsource the SOP to an outside vendor raise**
26 **costs on customers?**

1 A. No. In suggesting that the Company's proposal would raise costs on customers,⁷
2 Ms. Alexander appears to mistakenly assume that the fees associated with SOP are
3 imposed on customers. This is incorrect. Under both the Company's current and
4 proposed SOP, participating EGSs, not customers, are responsible for paying the
5 applicable fee.

6

7 **Q. Ms. Alexander suggests that the Company places undue weight on the referral**
8 **and enrollment rates of the FirstEnergy Companies' Customer Referral**
9 **Program in supporting its SOP proposal.⁸ Do you agree?**

10 A. No, I do not agree. To compare the SOP referral and enrollment rates of
11 Pennsylvania's EDCs, I used data publicly available at papowerswitch.com.⁹ Data
12 for the following EDCs are included: Duquesne Light; Met-Ed; Penelec; Penn
13 Power; West Penn Power; PPL; and PECO. The First Energy companies – Med-
14 Ed, Penelec, Penn Power, and West Penn Power – align most closely with
15 Duquesne Light's proposed outsourced program; their service territories are the
16 most geographically similar to Duquesne Light's and their SOP is outsourced to
17 AllConnect. For calendar year 2019 – the year on which I based my comparison –
18 the First Energy Companies had a referral rate of 42% and an enrollment rate of
19 92%, compared to Duquesne's referral rate of 8% and enrollment rate of 81%.

⁷ OCA St. No. 2, p. 4, lines 3-4 ("I do not recommend that ratepayers incurred [sic] higher costs for the SOP.")

⁸ OCA St. No. 2, p. 14, lines 3-6.

⁹ https://www.papowerswitch.com/media/3yfjdg1r/edc_sop_stats063020.pdf

1 PPL does not outsource to Allconnect, it uses a different vendor to
2 administer its SOP. However, PPL's enrollment rate is 74%. So, PPL's experience
3 with its SOP also supports my expectation that outsourcing the SOP will increase
4 customer participation.

5 PECO – who outsourced to Allconnect until August 2019 – reports referrals
6 differently from the other EDCs; therefore I do not believe PECO would provide
7 an appropriate comparison.

8

9 **Q. Ms. Alexander expresses concern that, if the Company's SOP proposal is**
10 **adopted, Allconnect may present information regarding the SOP in a biased**
11 **or "promotional" manner, as opposed to a fair and neutral representation of**
12 **the program.¹⁰ How do you respond to this concern?**

13 **A.** Ms. Alexander's concern is purely speculative. The Allconnect representatives will
14 read the script as prescribed – which itself is fair and balanced. Additionally,
15 Duquesne Light will conduct ongoing monitoring, including reviewing recorded
16 calls, to ensure an appropriate tone and delivery of the script.

17

18 **Q. Mr. Geller recommends that customers calling with high bill concerns be**
19 **screened for CAP eligibility prior to being referred to SOP, and that customers**

¹⁰ OCA St. No. 2, p. 14, lines 7-9.

1 **eligible for Universal Services Programs not be referred to SOP.¹¹ Do you**
2 **agree?**

3 A. No. Duquesne Light's CSRs are trained to consider a broad array of potential
4 options to assist customers with high bill concerns, including both Universal
5 Services Programs and the Standard Offer Program. Additionally, the conversation
6 may include payment arrangements, a referral to PaPowerSwitch.com, budget
7 billing, etc. The discussion is tailored to the customer's situation and how he/she
8 reacts to the options presented. While I agree that enrolling in CAP may be the best
9 option for many customers who are eligible for it, I believe that it is important to
10 give customers the options available to them and allow them to make a choice;
11 accordingly, I do not agree that customers who may be eligible for CAP should
12 remain unaware of SOP.

13

14 **Q. Ms. Alexander and Mr. Geller recommend that the Company conduct a study**
15 **of the prices charged by SOP suppliers following their introductory 12-month**
16 **fixed price contracts with participating customers.¹² How do you respond to**
17 **this recommendation?**

18 A. I am reluctant to agree to such analysis for two reasons:

19 1) As Duquesne Light witness Fisher describes in his rebuttal
20 testimony (DLC St. No. 3-R), when establishing the SOP, Duquesne Light followed
21 the Commission's clear SOP guidelines that stated, "At the conclusion of the

¹¹ CAUSE-PA St. No. 1, p. 28, lines 6-10.

¹² OCA St. No. 2, p. 16, lines 8-10; CAUSE-PA St. No. 1, p. 31, lines 4-6.

1 Standard Offer period, absent affirmative customer action to enter into a new
2 contract with the EGS, the customer's enrollment with a different EGS or the
3 customer's return to default service, the customer will remain with the EGS on a
4 month-to-month basis, and shall not be subject to any termination penalty or fee.”¹³

5 It is my understanding that the SOP model was discussed at length by numerous
6 stakeholders in a state-wide, Commission-led process. Therefore, the Company
7 believes there is little reason to conduct such an analysis absent a change in
8 Commission policy regarding the structure of the SOP.

9 2) Time and resources will be required to conduct and report on this
10 analysis, and neither Ms. Alexander nor Mr. Geller suggest an appropriate
11 treatment for this cost.

12
13 **Q. Ms. Alexander recommends the Company conduct a survey of customer**
14 **preferences and experiences prior to implementing any SOP in a future DSP.**¹⁴
15 **How do you respond to this recommendation?**

16 **A.** I believe that customer feedback and an assessment of customers’ understanding of
17 the SOP and energy supply choice in general can be beneficial in future
18 proceedings. That being said, surveys and focus groups can be quite costly to
19 conduct, and Ms. Alexander has not considered the cost of doing so. Consideration

¹³ Final Order, *Investigation of Pennsylvania’s Retail Electricity Market: Intermediate Work Plan*,
Docket I-2011-2237952, Adopted March 1, 2012, p. 32.

¹⁴ OCA St. No. 2, p. 16, lines 3-10.

1 should also be given to specifically how the information would be used, vis-à-vis
2 the EDC's ability to recommend changes to or discontinuation of the program.

3

4 **Q. Please summarize Ms. Alexander's concerns and recommendations regarding**
5 **the Company's current scripts for referring customers to AllConnect for other**
6 **moving services.**

7 A. As I describe in my direct testimony,¹⁵ the Company already offers to refer new or
8 moving customers to Allconnect for optional moving services. Ms. Alexander
9 argues that the Company's referral script currently in use does not adequately
10 explain that the transfer to Allconnect is optional.¹⁶ Per the Company's current
11 "New/Move Service" script, a customer service representative reads the following
12 at the conclusion of a call:

13 I am now going to transfer you to AllConnect to verify your
14 service with Duquesne and present you with additional services.

15
16 Ms. Alexander asserts, "This statement does not allow customers to decline
17 the transfer, implies that the customer's service with Duquesne Light is not yet
18 complete, and calls into question the appropriateness of this relationship with
19 AllConnect."¹⁷

20

21 **Q. What is your response to Ms. Alexander's concerns?**

¹⁵ DLC St. No. 5, p. 10, line 21 – p. 11, line 4.

¹⁶ OCA St. No. 2, p. 15, lines 9-12.

¹⁷ OCA St. No. 2, p. 15, lines 9-12.

1 A. I concur with Ms. Alexander's suggestion that the script be modified to ensure that
2 the customer knows that the transfer to Allconnect is optional. The Company agrees
3 to amend its script as follows:

4 I am now going to transfer you to Allconnect to ~~verify your service~~
5 ~~with Duquesne~~ and present you with additional **optional** services.
6

7 **II. CAP SHOPPING**

8

9 **Q. Mr. Geller alleges that the Company lacks the necessary justification to**
10 **propose CAP Shopping.¹⁸ Please respond.**

11 A. Mr. Geller argues that neither the parties' settlement in the Company's DSP VIII
12 proceeding, nor the Commission's Secretarial Letter entered January 23, 2020, at
13 Docket No. M-2019-3007101, obligate the Company to propose a CAP Shopping
14 program in DSP IX. I am not an attorney, and I understand that the Company will
15 respond to Mr. Geller's legal arguments, to the extent necessary, in brief. However,
16 I will offer that the Company understands CAP Shopping to be an issue of some
17 importance to many stakeholders, including the Commission. The Company wishes
18 to be supportive of the Commission's policy priorities, so long as those priorities
19 can be implemented consistent with all appropriate considerations. If the
20 Commission determines, as Mr. Geller urges, that the Company's CAP Shopping
21 proposal is not appropriate at this time, the Company intends to abide by the
22 Commission's determination.

¹⁸ CAUSE-PA St. No. 1, p. 42, line 17 – p. 43, line 20.

1

2 **Q. Mr. Geller expresses concern that the Company's CAP Shopping proposal**
3 **may lead to some CAP customers paying EGS rates in excess of the**
4 **Company's price to compare.¹⁹ Please respond.**

5 A. The intent of CAP Shopping is to enable CAP customers to participate in the
6 competitive retail electric supply market while ensuring, to the extent practicable,
7 that the customer does not pay a rate higher than that of the PTC.

8 As I discussed in my direct testimony, the Company's CAP Shopping
9 proposal will prevent CAP customers from being charged a rate in excess of the
10 PTC in the great majority of instances. The Company will have system monitors
11 in place to ensure that customers who are already in CAP do not sign-on with a
12 supplier charging more than the PTC; such EGS enrollment requests will be
13 rejected.

14 Mr. Geller's concern only arises in the scenario of customers who are
15 under contract with an EGS but who qualify for and want to enroll in CAP (i.e.,
16 CAP customers with "holdover EGS contracts"). Mr. Geller is correct that under
17 the Company's CAP Shopping proposal, these customers could potentially be
18 enrolled in CAP while also paying an EGS rate higher than the PTC for a period
19 of time. However, this does not warrant rejection of the Company's proposal.
20 Requiring these customers to wait until their EGS contract expiration would delay
21 their enrollment in CAP and thus require them to pay a higher monthly payment

¹⁹ CAUSE-PA St. No. 1, p. 44, line 22 – p. 45, line 7.

1 than what would be afforded to them via CAP. While there is a risk that these
2 customers may be paying more than the PTC, they would be doing so for a
3 limited period of time (e.g., through contract expiration or for a transition period
4 not to exceed 120 days.)
5

6 **Q. Is Mr. Geller's stated concern consistent with CAUSE-PA's position in the**
7 **FirstEnergy Companies' default service plan proceedings concerning the**
8 **development of those companies' CAP shopping program?**

9 A. No. As I indicated in my direct testimony, many of the essential components of the
10 Company's CAP shopping proposal – including the transition periods for CAP
11 customers on holdover EGS contracts – are drawn from, and are substantively
12 identical to, corresponding components of FirstEnergy's CAP shopping programs
13 the Commission approved by Order entered February 28, 2019 at Docket Nos. P-
14 2017-2637855 et. al. In its Order, the Commission adopted the following
15 guidelines:

- 16 a. PCAP customers who are served under a fixed duration contract with
17 an EGS as of June 1, 2019 (a "pre-existing fixed duration contract")
18 may remain with their EGS until the expiration date of the fixed
19 duration contract or the contract is terminated, whichever comes first.
20
21 b. Non-PCAP customers served under a fixed duration contract who
22 subsequently enroll in PCAP (also considered to be served under a
23 "pre-existing fixed duration contract") may remain with their EGS
24 until the expiration date of the fixed duration contract or the contract is
25 terminated, whichever comes first.
26
27 c. Upon expiration or termination of a pre-existing fixed duration
28 contract, the EGS must either: (a) enroll the PCAP customer under a
29 contract compliant with the new PCAP shopping rules; or, (b) return
30 the PCAP customer to default service. For EGSs serving PCAP

1 customers under a month-to-month contract as of June 1, 2019, the
2 EGS must either: (a) return the PCAP customer to default service
3 effective June 1, 2019; or, (b) enroll the PCAP customer under a
4 contract compliant with the provisions, above, with an effective date of
5 June 1, 2019.

- 6
7 d. For EGSs serving non-PCAP customers under a month-to-month
8 contract who subsequently enroll in PCAP, the EGS must, within 120
9 days of the customer's PCAP enrollment, either: (a) return the PCAP
10 customer to default service; or, (b) enroll the PCAP customer under a
11 contract compliant with the provisions, above.

12
13 These transition period guidelines are functionally identical to those the
14 Company has approved in this proceeding. The only material difference appears to
15 be in CAUSE-PA's opinion on them. As the Commission's Order points out,
16 CAUSE-PA supported these guidelines as applied to FirstEnergy:

17 No party expressed opposition to the Commission's
18 proposal. CAUSE-PA opines that the proposed timeframes
19 and required notices with respect to the transition of
20 existing and future contracts appear to strike a reasonable
21 and appropriate balance to ensure that the contractual rights
22 of suppliers are preserved. (CAUSE-PA at 3.)
23

24 **Q. Mr. Geller critiques the Company's plans to educate customers about CAP**
25 **shopping.²⁰ How does Duquesne propose to educate customers about CAP**
26 **shopping?**

27 A. At the outset of the program, CAP customers will be notified via on-bill messaging
28 that they are now able to shop for their electric supply. This messaging will direct
29 customers to visit a website – accessible via smartphone, tablet, or computer -- that
30 will include all of the details pertinent to CAP shopping.

²⁰ CAUSE-PA St. No. 1, p. 49, line 9 – p. 50, line 8.

1 As Duquesne’s CAP customers are also accustomed to reaching out to their
2 Community Based Organization (CBO) for CAP program information and
3 guidance, CBO agents will also be thoroughly prepared to assist customers in their
4 understanding of and participation in CAP shopping. Similarly, the Company’s
5 Customer Service Representatives (CSRs) will also be trained to answer questions
6 about CAP Shopping.

7
8 **Q. How will the Company monitor the CAP Shopping program?**

9 A. The Company will monitor the CAP Shopping program in multiple ways. First,
10 the Company will check each EGS enrollment on CAP accounts to ensure that the
11 rate is not more than the PTC. Secondly, on-going monitoring – updated at least
12 monthly -- will be in place via control reports to ensure that rates do not shift
13 post-enrollment to be out of compliance with program guidelines that rates remain
14 less than the PTC. Lastly, the Company will conduct periodic reviews to assess
15 how much customers are saving through the program and how this impacts their
16 ability to avoid reaching the maximum annual CAP discount.

17
18 **Q. Mr. Geller and Ms. Alexander recommend that some portion of the costs of**
19 **implementing CAP Shopping, if such a program is approved, should be**
20 **recovered from EGSs.²¹ Do you agree?**

²¹ CAUSE-PA St. No. 1, p 52, lines 20-22; OCA St. No. 2, p. 20, lines 10-17.

1 A. No, I do not agree. Costs associated with CAP have historically been recovered
2 from customers through Rider 5 of the Company's Retail Tariff. Further, the
3 Company has no practical way to accurately recover these costs from EGSs.
4 Company witness Mr. Ogden explains the practical impediments to developing a
5 method of recovering these costs from EGSs in his rebuttal testimony, DLC St. No.
6 4-R.

7
8 **III. ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM**

9 **Q. Please summarize the comments and recommendations presented by EGS**
10 **Parties' witness Kallaher regarding the Company's EV TOU Pilot Program**
11 **proposal.**

12 A. Mr. Kallaher recommends that the Commission reject the Company's EV-TOU
13 Pilot Program proposal. He alleges that the Company "short-circuited what was
14 intended to be a more robust collaboration among stakeholders regarding the
15 possible development of TOU rates for EVs".²² Mr. Kallaher also suggests that
16 allowing the Company to move forward with this proposal will impede EGSs'
17 offering EV-related TOU programs in Pennsylvania.²³

18 He offers two primary recommendations:

²² EGS Parties St. No. 1, p. 19, lines 2-4.

²³ EGS Parties St. No. 1, p. 20, lines 10-11.

- 1 1. The Company should convene a working group to examine the issues raised in
2 the Secretarial Letter entered January 23, 2020, at Docket No. M-2019-
3 3007101 (“Secretarial Letter”).²⁴
4 2. The Company should issue an RFI from “competitive entities to enhance the
5 development of the EV market in Duquesne’s service territory, using
6 measures that could be implemented within the scope of Duquesne’s DSP.”²⁵
7

8 **Q. Do you agree with Mr. Kallaher’s assertion that by proposing an EV-TOU**
9 **rate pilot, the Company “short-circuited” a stakeholder engagement**
10 **process?**

11 A. No. Mr. Kallaher’s assertion does not hold up under examination.

12 First, I observe that by proposing an EV-TOU pilot program as part of the
13 DSP proceedings, the Company is engaging interested parties, including EGS
14 Parties and Mr. Kallaher himself, in a robust discussion “among stakeholders
15 regarding the possible development of TOU rates for EVs”.

16 Second, contrary to Mr. Kallaher’s suggestions, the Company did engage
17 with EGSs about its proposed EV-TOU Pilot program prior to filing. Mr. Kallaher
18 complains:

19 I would have preferred to have seen Duquesne reach out to other
20 stakeholders in the three months between the issuance of the
21 Secretarial Letter and the filing of Duquesne’s DSP to discuss
22 possible approaches to providing consumer with EV TOU rates.

²⁴ EGS Parties St. No. 1, p. 21, line 19 – p. 22, line 4.

²⁵ EGS Parties St. No. 1, p. 22, lines 6-7.

1 Instead, Duquesne chose to do it themselves, without any evidence
2 that there were other options available that would have made use
3 of the competitive market rather than circumventing it.²⁶
4

5 Contrary to Mr. Kallaher's suggestion, the Company's EV-TOU Pilot
6 Program proposal represents the latest step in an ongoing stakeholder
7 collaboration, including the Company, customer advocates, industry groups, and
8 EGSs, regarding TOU rates. For example, consistent with the parties' settlement
9 in the Company' 2018 base rate proceeding (Docket No. R-2018-3000124),
10 during DSP VIII, the Company recently held two collaborative stakeholder
11 meetings to discuss its TOU pilot and plan rates on April 23, 2019 and June 20,
12 2019. Despite the fact that EGSs, including Mr. Kallaher's employer Direct
13 Energy, were invited to participate, only one EGS attended. That EGS was not an
14 active participant and did not provide any TOU suggestions or proposals for
15 consideration in DSP IX as requested by the Company. The Company has
16 provided ample opportunity for EGSs to engage on this topic.

17
18 **Q. Do you agree with Mr. Kallaher's argument that the Company's EV-TOU**
19 **Pilot Program proposal is inconsistent with the Commission's direction**
20 **expressed in the Secretarial Letter?**

21 **A.** No, I disagree with Mr. Kallaher's comments. The relevant portion of the
22 Secretarial Letter provides: "Accordingly, we urge all parties participating in the

²⁶ EGS Parties St. No. 1, p. 20, lines 4-9.

1 upcoming DSP proceedings to consider how EV specific TOU rate offerings
2 could be made available to consumers.”²⁷

3 This is exactly what the Company has done. By proposing the EV-TOU
4 Pilot Program as part of DSP IX, the Company has provided stakeholders –
5 including the EGS Parties – with an opportunity “to consider how EV specific
6 TOU rate offerings could be made available to consumers.”

7
8 **Q. Do you agree with Mr. Kallaher’s argument that the Company’s EV-TOU**
9 **Pilot Program will impede EGSs from offering EV TOU programs?**

10 A. No. First, EGSs have shown no serious interest to date in developing EV-TOU
11 programs. In discovery, Mr. Kallaher admitted that he is not aware of any EGSs
12 offering an EV-TOU rate or program in Pennsylvania. See Exhibit KMS-1R. It
13 would be unreasonable and unfair to customers to prohibit the Company from
14 offering an EV-TOU rate simply because an EGS *might* choose to offer one in the
15 future.

16 Second, the Company has supported, and will continue to support, EGS-
17 offered EV-TOU programs in its service territory. EGSs wishing to offer an EV-
18 TOU rate in the Company’s service territory may do so using the Company’s
19 dual-billing or consolidated bill-ready billing options.

²⁷ Secretarial Letter pp. 6-7.

1 Third, as Mr. Kallaher notes,²⁸ this is an evolving market with lots of room
2 for creativity and innovation. The Company's EV-TOU Pilot Program will not
3 foreclose the potential for EGS and others to offer similar or other innovative
4 solutions to customers. Furthermore, as I discuss below, the Company intends to
5 provide stakeholders with information regarding the implementation of its EV-
6 TOU Pilot Program. EGSs and EDCs across Pennsylvania will be able to benefit
7 by learning from the Company's experiences with this Pilot.

8
9 **Q. Do you agree with Mr. Kallaher's recommendations regarding convening an
10 EV TOU Working Group?**

11 A. No, I disagree with Mr. Kallaher's recommendations. Mr. Kallaher's suggestion is
12 unnecessary and would simply delay providing EV customers with an opportunity
13 for savings.

14 First, as discussed above, the Company has already engaged in
15 collaborative stakeholder discussions – in which Mr. Kallaher's employer
16 declined to participate – regarding the development of TOU rates. There is no
17 need to delay the Company's proposed EV-TOU Pilot Program to accommodate
18 yet another round of stakeholder meetings.

19 Second, to the extent Mr. Kallaher desires a working group to discuss
20 issues raised in the Secretarial Letter more generally, I would not be opposed to
21 such discussions, but I believe they would be better addressed at the statewide

²⁸ EGS Parties St. No. 1, p. 21, lines 9-10.

1 level. The Secretarial Letter is not exclusive to Duquesne Light's territory. If the
2 EGS Parties are interested in this topic, they can propose that the Commission
3 institute a generic working group. But again, any such process should not delay
4 approval of the Company's proposed EV-TOU Pilot Program. If the outcome of
5 such a process would necessitate modifications to the Company's EV-TOU Pilot
6 Program, the Company can always propose such modifications if and when they
7 are warranted.

8
9 **Q. Do you agree with Mr. Kallaher's recommendation that the Company "issue**
10 **an RFI for proposals for competitive entities to enhance the development of**
11 **the EV market in Duquesne's service territory, using measures that could be**
12 **implemented within the scope of Duquesne's DSP"²⁹?**

13 A. No. I do not understand this recommendation, and based on his response in
14 discovery, it does not seem that Mr. Kallaher has any specific ideas to offer on
15 this topic. In discovery, Mr. Kallaher was unable to provide any concrete
16 suggestions regarding the products or programs that the Company might procure
17 through this RFI. Similarly, Mr. Kallaher could not suggest who – other than
18 EGSs – might be invited to respond to this RFI. See Exhibit KMS-1R. I therefore
19 am unclear about exactly what Mr. Kallaher is proposing, and in the absence of
20 further detail, I cannot meaningfully respond to his recommendation.

²⁹ EGS Parties St. No. 1, p. 22, lines 5-7.

1 To the extent Mr. Kallaher envisions that this RFI would procure an EV-
2 TOU supply product from EGSs, as Company witness John Peoples discusses at
3 pp. 6-7 of his rebuttal testimony (DLC St. No. 2-R), the Company has conducted
4 such a procurement in past DSPs. The EGSs that had won the most recent TOU
5 supply procurement opted to stop supplying a TOU product.

6
7 **Q. Please summarize the comments and recommendations regarding the**
8 **Company’s EV-TOU Pilot Program presented by CAUSE-PA witness Geller.**

9 A. Mr. Geller supports the Company’s proposal to exclude CAP customers from the
10 EV- TOU Pilot Program, noting that allowing participation would undercut
11 CAP’s goal to “provide an affordable bill to economically vulnerable
12 households”³⁰, and outlining some of the challenges TOU rates can present for
13 economically vulnerable customers who often have more limited ability to shift
14 load.³¹

15 Mr. Geller suggests implementing additional protections for confirmed
16 low-income customers, as well as those with medical certificates, who choose to
17 enroll in the EV-TOU Pilot Program.³² For example, he proposes including
18 individualized bill impact assessments to help these customers understand
19 potential impacts from switching to the EV-TOU rate. Mr. Geller also
20 recommends conducting a third-party evaluation of the pilot program, including

³⁰ CAUSE-PA St. No. 1, p. 22, lines 12-13.

³¹ CAUSE-PA St. No. 1, p. 23, line 14 – p. 24, line 2.

³² CAUSE-PA St. No. 1, p. 23, lines 3-13.

1 assessing demographics of EV-TOU Pilot Program participants, and recommends
2 the Company create an EV-TOU rate for mass transit in its next DSP filing.³³

3
4 **Q. What is your general response to Mr. Geller's recommendations regarding**
5 **EV-TOU customer protections?**

6 A. I believe that the Company's goals on this topic are largely aligned with those of
7 CAUSE-PA. In particular, the Company wants eligible customers to enroll if they
8 will benefit from the EV-TOU Pilot Program, and correspondingly plans to offer
9 information and tools to help all customers, including confirmed low income and
10 those with medical certificates, make the best decision for them.

11 For example, Mr. Geller recommends the Company provide customers
12 contemplating the EV-TOU rate with "an individualized bill impact assessment
13 based on their actual usage patterns over the prior year[.]"³⁴. The Company has
14 already proposed to provide individualized assessments that closely resemble
15 those Mr. Geller recommends. As I indicated in my direct testimony, the
16 Company will offer an online tool that will enable Residential customers to
17 answer questions about their EV, driving habits, preferred charging time, and
18 home energy use. This tool will then produce an estimated annual bill impact
19 comparison that will help Residential customers determine if enrolling in the EV-
20 TOU Pilot Program makes sense for them.³⁵ PG&E's EV Rate Calculator is an

³³ CAUSE-PA St. No. 1, p. 25, lines 18-20.

³⁴ CAUSE-PA St. No. 1, p. 24, lines 10-11.

³⁵ CAUSE-PA St. No. 1, p. 27, lines 10-13.

1 example of the type of tool the Company would provide to customers:
2 <https://ev.pge.com/rates/>. This tool will rely on a customer's projected usage
3 patterns, rather than historical usage, because historical usage will frequently not
4 represent an accurate load profile for those customers who acquired an EV within
5 the past year.

6 Additionally, the Company's EV-TOU webpage and promotional
7 materials will include information about items to consider before enrolling, such
8 as customers' ability to shift load, base and EV, during peak periods. Information
9 will also be included about customer protection and assistance programs.

10 Customers enrolled in the EV-TOU Pilot Program will receive regular
11 communications about their usage and comparison to the standard DSP offer,
12 along with information about PA Power Switch that will enable them to determine
13 if another rate option would be more advantageous.

14 At any point customers will have the ability to switch from the EV-TOU
15 Pilot Program to another supply rate option if they determine that another option
16 works better for them. If they elect to leave the EV-TOU Pilot Program rate they
17 will be unable to re-enroll in the Pilot for 12 billing months. The option to leave
18 the EV-TOU Pilot Program rate at any time provides an additional protection for
19 all participating customers.

20

1 **Q. Do you agree with Mr. Geller’s recommendation that the Company provide**
2 **separate additional communications regarding the EV-TOU Pilot Program**
3 **to all confirmed low-income and medically vulnerable customers?**

4 A. No. Proactively sending out a separate communication to all low-income and
5 medically-vulnerable customers – many of whom may not be eligible for or
6 interested in the EV-TOU rate – has the potential to cause significant confusion.
7 As Mr. Geller acknowledges, “I recognize that it is highly unlikely that a low
8 income consumer would qualify for Duquesne’s proposed EV-TOU rate option,
9 as it is highly unlikely that a low income consumer would own, lease, or even rent
10 a plug-in electric vehicle given the current cost of such vehicles.”³⁶ I therefore
11 question whether the unsolicited mailings he appears to have in mind would yield
12 benefits commensurate with their costs. I believe the approach I describe above
13 and in my direct testimony, wherein the Company provides customers with bill-
14 comparison tools and other critical information to consider before enrolling in the
15 EV-TOU Pilot Program, will more efficiently ensure that low-income customers
16 are directed to appropriate programs and resources.

17
18 **Q. Do you agree with Mr. Geller’s recommendation that the Company conduct**
19 **a third-party evaluation of the EV-TOU Pilot Program?**

20 A. No. The Company will conduct robust monitoring and reporting of the EV-TOU
21 Pilot Program, so an additional third-party evaluation would not be an efficient

³⁶ CAUSE-PA St. No. 1, p. 24, lines 14-17.

1 use of customer dollars. As I addressed in my response to NRDC Set I-19 (see
2 Exhibit KMS-2R), the Company will prepare and publicly share a pilot evaluation
3 report that looks at a number of key metrics, including but not limited to:

- 4 • Number of EV TOU Pilot Program enrollees over time
- 5 • EV TOU Pilot Program customer retention rate
- 6 • Customer satisfaction
- 7 • EV growth in Duquesne Light service territory
- 8 • Share of load shifted to off-peak and shoulder periods by enrolled customers
- 9 • Total and average energy consumption per household and premise during
10 peak, off-peak, and shoulder periods
- 11 • Net customer bill impacts

12 The Company will evaluate the results of the EV-TOU Pilot Program
13 based on these and any other relevant factors that arise during the DSP IX time
14 frame as part of determining an appropriate path forward for future programs.

15
16 **Q. Mr. Geller also proposes that his recommended third-party evaluation of the**
17 **EV-TOU Pilot Program include an assessment of participants' demographic**
18 **information, including income, age, race, ethnicity, and disability status.³⁷**
19 **Whether the Company assesses the EV-TOU Pilot Program in-house or**
20 **obtains a third-party evaluation, should the Company be required to collect**
21 **and analyze these data as part of such assessments?**

³⁷ CAUSE-PA St. No. 1, p. 25, lines 7-8.

1 A. No. Requiring customers to provide the demographic information Mr. Geller
2 identifies may deter customers from signing up for the EV-TOU Pilot Program.
3 Even requesting those sensitive data on an optional basis may have a chilling
4 effect on customer enrollments, and may lead to high rates of customers opting
5 out of the information, which would undermine the usability of the resulting data.
6 The Company will, however, collect and share aggregated geographic information
7 about enrollees.

8

9 **Q. Do you agree with Mr. Geller that the Company should be required to**
10 **develop an EV TOU rate for mass transit in its next DSP filing?**

11 A. As an initial matter, I observe that if the Company's EV-TOU Pilot Program is
12 approved, mass transit fleet default service customers will have access to a TOU
13 rate. Customers with demands less than 200kW can participate in the EV-TOU
14 Pilot Program; those with demands above 200kW can take hourly-priced service
15 under the Company's Rider No. 9.

16 That said, the Company appreciates and will take into consideration Mr.
17 Geller's recommendation as it evaluates options for its next DSP filing. While I
18 do not believe the Company should be specifically *required* to offer an EV-TOU
19 rate specifically for mass transit fleet charging, the Company will continue to
20 engage with the Port Authority of Allegheny County and other local mass transit
21 partners to determine how it can best provide support for mass transit
22 electrification efforts.

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Q. Please summarize the comments provided by NRDC witness Harris regarding EV-TOU.

A. Witness Harris recommends the Commission approve the Company’s proposed EV-TOU Pilot Program with modifications.³⁸ She argues that the program will help encourage transportation electrification in the Company’s service territory, provide customers with opportunities for fuel cost savings, improve air quality and reduce greenhouse gas emissions, and may benefit all customers by lowering the price of electricity.³⁹ I appreciate Ms. Harris’s support for its EV-TOU Pilot Program and agree with her assessment about the multitude of benefits that such a program can provide.

Ms. Harris suggests that commercial customers be required to pass along the EV TOU price signals to EV drivers to encourage them to charge during off-peak and shoulder periods.⁴⁰ She also suggests the Company consider best practices from other locations to determine price ratios and time of use periods, but offers no specific recommendation regarding approach.⁴¹ She additionally offers that the Company consider an EV-only TOU rate to provide greater flexibility to customers with less ability to shift base load.⁴²

³⁸ NRDC St. No. 1, p. 2, lines 17-18.
³⁹ NRDC St. No. 1, p. 3, lines 4-9.
⁴⁰ NRDC St. No. 1, p. 8, lines 1-6.
⁴¹ NRDC St. No. 1, p. 11, lines 6-8.
⁴² NRDC St. No. 1, p. 11, line 19 – p. 12, line 4.

1 **Q. Do you believe that the Company should require EV-TOU customers to pass**
2 **the EV-TOU price signal to EV drivers?**

3 A. No. While I agree with Ms. Harris regarding the potential benefits of price signals
4 being passed to the end user, at this nascent stage of EV market development in
5 Pennsylvania, it is important for commercial and industrial (“C&I”) customers
6 offering EV charging to EV drivers to determine the pricing approach that works
7 best for them. The Company will provide educational resources for C&I
8 customers about EV TOU and other supply rate options so they can select the
9 option that will work best for them, their employees, fleet, and/or customers based
10 on charging station usage.

11 Additionally, the Company has no practical means for enforcing the
12 requirement that Ms. Harris suggests. The Company is not privy to the pricing
13 arrangements between C&I customers with EV charging facilities and the end-
14 user EV drivers that use those facilities. Requiring price signals to be passed on
15 to drivers would thus be impracticable at best, and it is not clear that it would
16 provide meaningful benefits at this time.

17
18 **Q. Do you agree with Ms. Harris’s recommendation that the Company educate**
19 **customers about whole-premises TOU versus separate metering?⁴³**

⁴³ NRDC St. No. 1, p. 12, lines 2-4.

1 A. Generally, yes. As part of its educational materials regarding the EV-TOU Pilot
2 Program, the Company will provide information to customers about their options
3 regarding whole-premise TOU versus separate metering.
4

5 **Q. Do you agree with Ms. Harris’s recommendation that the Company “modify
6 its approach to C&I customers by considering the potential for EV-load to
7 push customers over the 200kW threshold and adopt best practices for C&I
8 rates”⁴⁴?**

9 A. The Company has considered the potential for EV load to push customers’
10 demands above the 200kW threshold, and as part of its educational materials to
11 nonresidential customers, will provide information and resources to customers
12 addressing this issue. The Company may specifically address DCFC stations,
13 though given DCFC stations’ high electric loads, customers for these installations
14 will likely not be eligible for the EV-TOU Pilot Program. And as Ms. Harris also
15 notes,⁴⁵ usage at DCFC public stations is highly variable, and so customers with
16 public DCFC may not be good candidates for the EV-TOU Pilot Program even if
17 they are eligible.
18

⁴⁴ NRDC St. No. 1, p. 22, lines 15-18.

⁴⁵ NRDC St. No. 1, p. 20, lines 9-11.

1 **Q. Do you agree with Ms. Harris’s recommendation that the Company “look to**
2 **best practices from other jurisdictions when considering the appropriate and**
3 **must [sic] successful price ratios” for its EV-TOU rates⁴⁶?**

4 A. Company witness Mr. Ogden explains the Company’s choice of EV-TOU rate
5 factors at p. 18, line 16 – p. 19, line 6 of his direct testimony. I appreciate Ms.
6 Harris’s comments on this topic, and the Company will continue to consider the
7 experiences of other jurisdictions in developing future EV-TOU offerings.

8

9 **Q. Ms. Harris advocates that the EV TOU Pilot Program be approved as a**
10 **“standard part of its Default Service Plan rather than as a pilot.”⁴⁷ Do you**
11 **agree?**

12 A. I am not sure I understand Ms. Harris’s recommendation. As proposed, the
13 Company’s EV-TOU Pilot Program will be open to all eligible customers for the
14 entire duration of DSP IX, so I believe it already constitutes a “standard part” of
15 DSP IX. To the extent Ms. Harris recommends that the Company’s EV-TOU Pilot
16 Program be made permanent beyond the term of DSP IX, I would disagree with
17 such recommendation. I agree that EV TOU rates have been successfully
18 implemented elsewhere and the Company can learn from those efforts. However,
19 the Company must maintain the flexibility to propose modifications to its EV-
20 TOU offerings in the future, particularly since this rate would be the first of its
21 kind in Pennsylvania.

⁴⁶ NRDC St. No. 1, p. 11, lines 6-7

⁴⁷ NRDC St. No. 1, p. 22, lines 21-22.

1

2 **Q. Please summarize the EV-TOU Pilot Program recommendations offered by**
3 **OCA witness Dr. Ogur.**

4 A. Dr. Ogur offers three recommendations to the EV-TOU Pilot Program:

5 1. The Company should “recalculate EV TOU rate factors each year rolling
6 four-year average LMPs, customer class loads, and PJM capacity prices
7 applicable to the DY”⁴⁸.

8 2. The Company should “clearly state and justify any direct assignment of
9 EV-TOU implementation costs to customer classes and allocate non-direct
10 assignment costs to customer classes on the basis of customer class default
11 service loads, as measured in total kilowatt-hours (“kWh”)”.⁴⁹

12 3. The Company should present a detailed evaluation report of the EV-TOU
13 Pilot Program as part of its next DSP filing and propose revisions based on
14 its findings.⁵⁰

15 Company witness Ogden addresses Dr. Ogur’s first recommendation in his
16 rebuttal testimony; we both address his second recommendation.

17

18 **Q. With respect to Dr. Ogur’s second recommendation, why does the Company**
19 **propose to allocate the majority of EV-TOU Pilot Program outreach and**
20 **implementation costs to residential customers?**

⁴⁸ OCA St. No. 1, p. 14, lines 22-24.

⁴⁹ OCA St. No. 1, p. 14, line 25 – p. 15, line 3.

⁵⁰ OCA St. No. 1, p. 15, lines 3-9.

1 A. The majority of the Company's incremental education costs associated with the
2 EV-TOU Pilot Program pertain exclusively to residential customers. As I
3 explained in detail in my responses to discovery questions OCA IV-1 through IV-
4 5, the bulk of the Company's new marketing, outreach, and educational efforts
5 will be tailored and marketed directly to residential customers. See Exhibit KMS-
6 2R.

7 This is not to say that nonresidential customers will be left out. Rather, as I
8 explained in my response to OCA IV-1:

9
10 The Company will serve and educate C&I customers
11 through direct outreach by its Major Accounts group, the
12 Transportation Electrification team, and engagement with
13 local non-profits and trade industry groups, and will
14 provide information to Small C&I and/or Medium C&I
15 <200 kW customers about the EV TOU Pilot Program
16 through its website.
17

18 See Exhibit KMS-2R.

19 These direct outreach efforts to nonresidential customers will primarily
20 leverage existing resources; therefore, the Company projects they will not yield
21 significant incremental costs.
22

23 **Q. What is your response to Dr. Ogur's recommendation that the Company**
24 **present a detailed report on the EV-TOU Pilot Program in four years?**

1 A. I accept Dr. Ogur's recommendation. As I discussed earlier in this testimony, the
2 Company will prepare a public evaluation report on the EV-TOU Pilot Program
3 prior to filing its next DSP.
4

5 **IV. RESIDENTIAL CUSTOMER BILLING**

6 **Q. Mr. Geller expresses concern that the price to compare information on the
7 Company's bill is difficult to identify and understand.⁵¹ Please respond.**

8 A. DLC is in the process of redesigning our bill with a targeted implementation date
9 of November 23, 2020. This bill redesign is intended to simplify the presentation
10 of billing information and to enable next-generation bill messaging and targeting
11 that is not available through the Company's current solution.

12 In addition to the redesigned bill's other readability improvements, the
13 redesigned bill will more clearly display the PTC in the Current Charges section of
14 the bill. This will facilitate "at-a-glance" customer comparison of the PTC to an
15 EGS's rates.

16 For Bill-Ready accounts, DLC will display the rate and charges provided
17 by the supplier. Bill-ready billing is the scenario where an EGS sends a calculated
18 billing amount to the EDC to generate a consolidated bill. As I indicated above,
19 bill-ready billing allows EGSs to employ alternative pricing structures, such as
20 fixed-price components and time-of-use rates. This differs from rate-ready billing,
21 whereby the EGS shares the applicable per-kWh rate and the EDC calculates the

⁵¹ CAUSE-PA St. No. 1, p. 55, lines 3-9.

1 charge to be included on the consolidated bill. The Company offers bill-ready
2 billing pursuant to the Commission's orders regarding EDCs' smart meter plans.
3 See Docket No. M-2009-2092655.

4 Thus, bill-ready suppliers are not required to provide a simple per-kWh rate
5 for energy. Instead, a bill message is displayed directing the customer to contact the
6 supplier for questions related to the supplier portion of the bill.

7

8 **Q. Mr. Geller recommends that the Company require bill-ready suppliers to**
9 **provide, and the Company's bills to display, a per-kWh rate next to the**
10 **Company's price to compare.⁵² Do you agree?**

11 A. No. This recommendation that bill ready suppliers be required to provide a per-
12 kWh rate is inconsistent with the structure of bill-ready billing. A bill-ready
13 supplier's supply price may not be based on a simple per-kWh rate, as Mr. Geller
14 seems to assume. As I indicated above, bill-ready billing allows suppliers to
15 implement alternative pricing structures, such as fixed-price components or time-
16 of-use energy rates. Such alternative structures do not lend themselves to being
17 represented on a customer's bill as a simple per-kWh rate.

18

19 **Q. What types of charges may EGSs include in bill ready supply charges for**
20 **residential customers?**

⁵² CAUSE-PA St. No. 1, p. 55, lines 11-13.

1 A. Per the Company's supplier coordination tariff, Tariff Electric Pa. P.U.C. No. 3S,
2 these charges may only contain charges for generation and transmission services.
3 Rule 12.1.7.1 provides that EGSs must sell all consolidated-billed accounts, which
4 includes all residential bill-ready residential accounts, into the Company's Purchase
5 of Receivables ("POR") program.⁵³ Rule 12.1.7 further provides that accounts sold
6 into the POR may only contain charges for generation and transmission services.⁵⁴

7 Taken together, these Rules prohibit EGSs from including charges for
8 nonbasic services as part of their bill-ready charges.

9
10 **Q. Do EGSs using bill ready billing include other types of charges, besides those**
11 **for generation and transmission services, in violation of these tariff**
12 **provisions?**

13 A. Conceivably, perhaps. As I indicated in my direct testimony (DLC St. No. 5, p. 15,
14 lines 20-21), the Company is not privy to EGSs' contracts with their customers.
15 Therefore, the Company does not know which nonbasic products or services, if any,
16 an EGS provides to its customers. It is therefore conceivable that EGSs may
17 include nonbasic charges in consolidated bills to residential customers, in violation
18 of the Company's tariff.

⁵³ "12.1.7.1 ELIGIBILITY REQUIREMENTS EGSs that choose Duquesne's consolidated billing option for all or a portion of their eligible customer accounts will be required to sell their accounts receivable to Duquesne for those customers for whom Duquesne issues a consolidated bill. . . ."

⁵⁴ "12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM Duquesne will purchase the accounts receivable, without recourse, associated with EGS sales of retail electric commodity, *comprised of generation and transmission services*, to residential customers and commercial and industrial ("C&I") customers. . . ." (Emphasis added.)

1

2 **Q. How do you propose to address Mr. Geller’s concern regarding nonbasic**
3 **charges billed by bill-ready EGSs?**

4 A. As I indicated above, the Company’s tariff already prohibits inclusion of nonbasic
5 charges in consolidated EGS bills to residential customers. As a “backstop” to
6 further enhance enforceability of this requirement, I propose to add an additional
7 enforcement mechanism to rule 12.1.7.1, shown below in bold:

8

9 **12.1.7 PURCHASE OF EGS RECEIVABLES (POR) PROGRAM**
10 **Duquesne will purchase the accounts receivable, without recourse,**
11 **associated with EGS sales of retail electric commodity, comprised**
12 **of generation and transmission services, to residential customers**
13 **and commercial and industrial (“C&I”) customers with monthly**
14 **metered demand less than 300 kW within Duquesne’s service**
15 **territory. Eligible customers are those customers taking delivery**
16 **service under the Company’s retail tariff Rate RS, RH, RA,**
17 **GS/GM and GMH, and who purchase their electric commodity**
18 **requirements from the EGS through consolidated billing with the**
19 **Company. Upon request, an EGS shall provide a written**
20 **certification to Duquesne that the EGS is providing only basic**
21 **electric supply to residential customers billed through**
22 **consolidated billing with the Company.**
23

24 This revision to rule 12.1.7.1 is included Company witness Ogden’s Exhibit DBO-
25 4R.

26 This revision is consistent with requirements found in the FirstEnergy
27 Companies’ and PECO’s electric supplier coordination tariffs. For example, rule
28 12.4.2(j) of West Penn Power’s supplier coordination tariff (Tariff Electric Pa.
29 P.U.C. No. 2S) provides in part, “Upon request, a Registered EGS shall provide a
30 written certification to the Company that the Registered EGS is providing only

1 Basic Electric Supply to Customers billed under Company Consolidated Billing.”
2 Similarly, rule 13 of PECO’s supplier coordination tariff (Tariff Electric Pa. P.U.C.
3 No. 1S) provides in part, “Upon request, an EGS shall provide a written
4 certification to the Company that the Supplier is providing only basic electric
5 supply to Customers billed under Consolidated EDC Billing.”

6

7 **Q. Does this conclude your rebuttal testimony?**

8 **A. Yes, it does.**

Exhibit KMS-1R

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :
for Approval of a Default Service Plan for the : Docket No. P-2020-3019522
Period June 1, 2021, through May 31, 2025 :

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 1) Reference page 21, lines 7-9 of Mr. Kallaher's direct testimony. Is Mr. Kallaher aware of any electric generation suppliers in Pennsylvania that offer an electric vehicle-specific time-of-use rate or program?

RESPONSE: No.

Provided By: Chris Kallaher

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 2) Reference EGS Parties' response to Question 1. To the extent Mr. Kallaher is aware of any such electric vehicle-specific time-of-use rates or programs, for each such rate or program, please identify:
- a) A brief description of the rate or program;
 - b) The length of time the program or rate has been offered;
 - c) The approximate number of customers enrolled in the rate or program; and
 - d) Whether the rate or program is offered in Duquesne Light's service territory.

RESPONSE: Not applicable.

Provided By: Chris Kallaher

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 3) Reference page 22, lines 5-14 of Mr. Kallaher's direct testimony. Please identify examples of products or programs that meet all of Mr. Kallaher's recommended criteria for the RFI; i.e., the product or program (i) would enhance the development of the EV market, (ii) could be provided by competitive entities, and (iii) could be implemented within the scope of the Company's default service plan.

RESPONSE: I did not have any specific products or programs in mind when I made this suggestion. The purpose of the RFI would be to solicit responses that would describe products or programs that would have those characteristics. One of the points of my testimony is that having the utility propose its own EV TOU rate in the context of its DSP as a means of enhancing the development of the market for EV is that this approach might miss much more effective options that might be available from the competitive market.

Provided By: Chris Kallaher

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 4) Reference page 22, lines 5-14 of Mr. Kallaher's direct testimony. Under Mr. Kallaher's recommendation, who would pay for the costs of the product(s) or program(s) procured through the RFI? How would recovery of such costs be allocated?

RESPONSE: The cost of any EV TOU product procured through the RFI would be paid by the customers who ultimately choose the product.

Provided By: Chris Kallaher

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 5) Reference page 22, lines 5-7 of Mr. Kallaher's direct testimony. With respect to the RFI that Mr. Kallaher proposes:
- a) Please identify the entities that Mr. Kallaher believes should be invited to respond to the RFI.
 - b) Did Mr. Kallaher estimate the cost to develop and implement the RFI? If so, provide any cost estimates and any support for those cost estimates.
 - c) Under Mr. Kallaher's recommendation, who would pay for the costs of developing and implementing the RFI? How would recovery of such costs be allocated?

RESPONSE:

- a) I did not envision that any particular entity would be invited to respond to the RFI. I would recommend that the RFI be published in a manner similar to other RFIs and RFPs issued by Duquesne and other Pennsylvania utilities such that entities that might be interested in responding would be likely to see the RFI. At the very least, I would ensure that licensed EGSs providing service in the Duquesne service territory were made aware of the RFI.
- b) I did not estimate the cost to develop and implement the RFI.
- c) I would recommend that the costs of developing and implementing the RFI would be paid in the same manner that the costs of developing and implementing other aspects of the default service plan, such as the proposed EV TOU rate, are recovered. If Duquesne can take that approach to recovering the costs of developing and implementing an EV TOU rate that only Duquesne itself can provide, I see no reason that the same approach could not be taken with respect to a product provided by an entity other than Duquesne.

Provided By: Chris Kallaher

Exhibit KMS-2R

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

OCA I- 10

10. Please provide the current scripts and training materials for used by DLC's third party agent authorized to present, discuss, and market the Standard Offer Referral Program.

Response:

DLC does not currently have a third-party agent authorized to present, discuss, and market the Standard Offer Program.

The Company is proposing to engage with AllConnect to perform these functions.

Based on subsequent discussions with AllConnect regarding SOP scripting, the Company proposes slight modifications to the script that AllConnect would present to customers. This script would read as follows:

*As a customer of **Duquesne Light**, I am pleased to offer you an opportunity to save money on the electricity portion of your utility bill. In Pennsylvania you can choose the company that generates your electricity - also known as your electric generation supplier. To encourage choice, the State Utility Commission has made the Standard Offer Program available to you.*

The Standard Offer Program offers a fixed price of xx cents per kilowatt-hour for one year provided by an Electric Generation Supplier. The fixed Standard Offer Program price provides an initial 7% discount off today's Price to Compare which is xx cents per kilowatt-hour. The Price to Compare will change again on the first of March, June, September and December. The Standard Offer Program price will not change through twelve monthly bills but the Price to Compare could be higher or lower than the Standard Offer Program price during this period.

***Duquesne Light** is still your utility company and is responsible for all your billing and service issues. You will continue to receive only one bill from Duquesne Light. You can cancel this contract anytime without penalty and select another supplier or return to default service with **Duquesne Light** for service at the Price To Compare. I can enroll you with an approved supplier of your choice from our list or I can select one for you. Do you have questions?*

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

OCA I- 10

After answering the customer's questions, AllConnect would then ask:

Do you know a supplier that you would like to select for this program, or would you like me to select one for you from a rotating list?

[Know Supplier or Random Selection]

*I've selected **[Supplier]** as your supplier for the Standard Offer Program, is that ok?*

Did Customer agree to supplier? Y/N

*If Yes: I have initiated the selection of **[Supplier]** as your supplier for the Standard Offer Program. They will send you detailed documentation to you in the mail within the next few days. Depending on your billing cycle, the supplier will begin to show on your Duquesne Light bill within 1 billing cycle.*

Please remember that you should continue to contact Duquesne Light for any questions related to your electric service, regardless of who you choose as a supplier and you can make changes to your supplier selection at any time.

We encourage you to make note of the Price-to-Compare portion of your utility bill monthly and if it goes below what you are paying for electricity through the Standard Offer Program, you can call back to re-enroll in the Program at the lower rate without incurring any penalties or fees.

Natural Resources Defense Council
(NRDC)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl and Emily Phan-Gruber

NRDC Set I-19

19. What metrics or data does the Company intend to use in order to evaluate the success of the pilot EV-TOU program, and does the company envision expanding the program in some fashion at the end of the program's duration (e.g., by offering a TOU rate to additional classes of customers)?

Response:

The Company will look at a range of metrics in order to evaluate the success of the Pilot, including but not limited to:

- Number of EV TOU Pilot Program enrollees over time
- EV TOU Pilot Program customer retention rate
- Customer satisfaction
- EV growth in Duquesne Light service territory
- Share of load shifted to off-peak and shoulder periods by enrolled customers
- Total and average energy consumption per household and premise during peak, off-peak, and shoulder periods
- Customer cost savings

The Company will evaluate the results of the Pilot Program based on these and any other relevant factors that arise during the DSP IX timeframe as part of determining an appropriate path forward for future programs.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV-1

1. Online Bill Estimate Tool
 - a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to the online bill estimate tool in each year of DSP IX.
 - b) Please provide cost breakdown by activity.
 - c) Will DLC make an online bill estimate tool available to Small C&I and/or Medium C&I <200 kW customers?

Response:

- a) The Company anticipates purchasing an online bill estimate tool for Residential Customers from a third party vendor. This will involve issuing a solicitation to receive competitive bids for the tool, working with the selected vendor to build the tool, coordinating set-up and integration of the tool with the Company's website, and sharing the tool with customers. For Years 2-4, the Company is anticipating ongoing costs associated with the tool such as updates, maintenance, etc..
- b) Costs by activity are estimated to be:
 - Year 1 – Tool design, set-up and implementation - \$50,000
 - Year 2 – Tool access, maintenance, and minor upgrades/improvements - \$8,000
 - Year 3 – Tool access, maintenance, and minor upgrades/improvements - \$8,000

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 1

- Year 4 – Tool access, maintenance, and minor upgrades/improvements - \$8,000
- c) The Company does not anticipate making an online bill estimate tool available to Small C&I and/or Medium C&I <200kW customers. The previously described tool will serve Residential customers. The Company will serve and educate C&I customers through direct outreach by its Major Accounts group, the Transportation Electrification team, and engagement with local non-profits and trade industry groups, and will provide information to Small C&I and/or Medium C&I <200 kW customers about the EV TOU Pilot Program through its website.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 2

2. Bill Insert

- a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to the bill inserts in each year of DSP IX.
- b) Please provide cost breakdown by activity (e.g. development of the insert, mailing costs).
- c) Will DLC mail bill inserts to Small C&I and/or Medium C&I <200 kW customers?

Response:

- a) The Company anticipates two main cost-incurring activities for the EV-TOU Rate Pilot bill insert: (1) developing content, designing, and producing the layout for the bill insert; and (2) printing the bill insert. Since the bill insert will be included with the printed bill there will be no additional postage costs.
- b) Annual costs are estimated to be:
 - Content development, design and production - \$1,000
 - Printing - \$11,250
- c) No, the bill inserts will only be included with Residential customer bills.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 3

3. Digital Advertising
- a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to digital advertising (e.g. production of ads, publication/broadcast of ads, ad venues and channels, form of ads) in each year of DSP IX.
 - b) Please provide cost breakdown by activity.
 - c) Will DLC's digital ads target or reach Small C&I and/or Medium C&I <200 KW customers as well? If not, please describe how DLC will ensure that the ads will target Residential customers only and how DLC can be certain that the ads will not reach Small C&I and/or Medium C&I <200 kW customers.

Response:

- a) The Company has not yet developed a detailed plan for digital advertising for the EV TOU Pilot Program, but anticipates primarily using social media advertising and display ads since those formats allow for optimal direct communication with targeted customer groups. The Company anticipates costs related to the design of the ads, working with marketing/ad placement vendor(s) to help identify the appropriate channels and keywords, and placing the ads.
- b) Average annual costs are estimated to be:
 - o Content development - \$2,000

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 3

- o Digital advertising strategy and placement - \$13,000

- c) The Company's ads will not target Small C&I and/or Medium C&I <200kW customers. The Company will use social media advertising and display ads to target Residential customers within Duquesne Light's service territory and target search terms used by Residential customers, including "home charging", "EV home charging", etc. The Company cannot guarantee that a Small C&I and/or Medium C&I <200kW customer will not see an ad, because Residential customers who view an ad may also own or be affiliated with Small and/or Medium C&I customers as well.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 4

4. Print Collateral and Event Promotion
- a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to print collateral and event promotion in each year of DSP IX.
 - b) Please provide cost breakdown by activity.
 - c) Will DLC's print collateral and event promotion activities target or reach the Small C&I and/or Medium C&I <200 KW customers? If not, please explain why not and how DLC can be certain of this.
 - d) Does DLC expect the print collateral and event promotion activities to impact EV-TOU subscription rate among the Small C&I and/or Medium C&I <200 kW customers? If not, please explain why not and how DLC can be certain of this.

Response:

- a) The Company anticipates three major cost-incurring activities – (1) developing content and design and layout for print collateral materials; (2) printing the collateral; and (3) hiring outside personnel to help staff events. The Company anticipates undertaking these activities in each year of DSP IX.
- b) Average annual costs are estimated to be:
 - o Content development, design, and layout - \$1,750
 - o Printing - \$4,000
 - o Event support - \$3,600

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 4

- c) The Company's print collateral and event promotion activities will not be targeted to Small C&I and/or Medium C&I <200kW customers. The Company will design the print collateral to address Residential customers. Additionally, the Company will attend events that are focused on Residential customers, such as SolarFest or the Pittsburgh Home and Garden Show.
- d) The Company does not expect that print collateral and event promotion activities will materially impact the EV TOU Pilot Program subscription rate among Small C&I and/or Medium C&I <200kW customers, since as noted in response to OCA IV-4(c) above, both the print collateral and events selected will target Residential customers. The Company does not currently plan to promote the EV TOU Pilot Program through print materials or events that are specifically geared toward Small C&I and/or Medium C&I <200 kW customers. As noted in OCA IV-1, Company personnel will conduct outreach to Small C&I and/or Medium C&I <200 kW customers on a more direct, targeted basis, and the Company will provide information targeted to Small C&I and/or Medium C&I <200 kW customers on its website.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 5

5. EV-TOU Monthly Email Set-up

- a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to EV-TOU Monthly Email Set-up in each year of DSP IX.
- b) Please provide cost breakdown by activity.
- c) Will the Small C&I and/or Medium C&I <200 kW customers receive emails as a result of this monthly email set-up task?

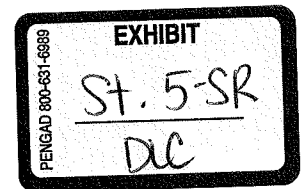
Response:

- a) The Company plans to work with a third-party vendor to design and deploy the EV-TOU monthly email.
- b) The Company anticipates a one-time cost:
 - o Email design - \$5,000Email distribution costs will be covered through an existing subscription.
- c) The Company will send monthly emails to Residential customers and not to Small C&I and/or Medium C&I <200 kW customers.

DUQUESNE LIGHT STATEMENT NO. 5-SR

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition Of Duquesne Light Company For Approval Of Default Service Plan For The Period June 1, 2021 Through May 31, 2025 : **Docket No. P-2020-3019522**



**SURREBUTTAL TESTIMONY OF
KATHERINE M. SCHOLL**

Dated: August 28, 2020

1 **Q. Please state your full name and business address.**

2 A. My name is Katherine Scholl. My business address is 411 Seventh Avenue, Mail
3 Drop 15-1, Pittsburgh PA 15219.

4

5 **Q. What is your position at Duquesne Light Company (“Duquesne Light” or
6 “Company”)?**

7 A. I am the Director of Customer Experience.

8

9 **Q. How long have you worked at Duquesne Light?**

10 A. I have been with Duquesne Light since May 2016.

11

12 **Q. Did you previously submit testimony in this proceeding on behalf of Duquesne
13 Light Company?**

14 A. Yes. I submitted direct testimony (Duquesne Light Statement No. 5) on April 20,
15 2020 and rebuttal testimony (Duquesne Light Statement No. 5-R) on August 14,
16 2020.

17

18 **Q. What is the purpose of your Surrebuttal Testimony?**

19 A. My surrebuttal testimony responds to comments of other parties’ witnesses on the
20 following topics:

- 1 1. CAP Shopping;
- 2 2. Demographic data collection of participants in the EV-TOU Pilot Program; and
- 3 3. The Company's residential bill design and EGS billing procedures.

4

5 **Q. Are you sponsoring any Exhibits along with your Surrebuttal Testimony?**

6 A. No.

7

8 **I. CAP SHOPPING**

9

10 **Q. Are there any preliminary statements you wish to make regarding the**

11 **Company's proposal for CAP Shopping?**

12 A. Yes. Based on parties' comments on the Company's CAP Shopping proposal, I

13 have doubts that it can be implemented successfully and yield customer benefits

14 commensurate with costs.

15 The parties in this proceeding have noted several concerns with aspects of

16 the Company's CAP Shopping proposal. In particular, Mr. Geller expresses

17 concern that customers who enroll in CAP with a carryover EGS contract may pay

18 rates in excess of the price-to-compare until their contract expires.¹ As I explained

19 in my rebuttal testimony, I believe that the transition process the Company

¹ CAUSE-PA St. No. 1, pp.40-42, 44-46; CAUSE-PA St. No. 1-R, pp. 11-12.

1 proposed is consistent with the Commission's guidelines and the FirstEnergy
2 Companies' CAP Shopping program.² However, I agree with Mr. Geller that this
3 transition process would likely cause some CAP customers with holdover EGS
4 contracts – and, correspondingly, the residential customers that pay the Universal
5 Services Charge – to pay higher rates than if CAP shopping were not allowed. I
6 understand and appreciate this concern.

7 Mr. Kallaher's comments in his rebuttal testimony have further amplified
8 this concern, as it pertains to whether the Company's CAP Shopping proposal can
9 be successfully implemented. Mr. Kallaher argues that the Company's PTC is not
10 an appropriate point of comparison for EGS supply rates, and that the Competition
11 Act was not designed or intended to produce EGS rates below default service rates.³
12 This position is at odds with one of the primary purposes of CAP Shopping; namely,
13 to help CAP customers reduce their electric bills as compared to default service. To
14 the extent EGSs feel they should not or cannot offer electric supply at a rate lower
15 than the PTC, then in my opinion, CAP shopping may be counterproductive.

16 There also remains the question of which is the appropriate recovery
17 mechanism for the costs of implementing CAP Shopping. In my direct testimony,
18 I estimated the cost to develop the capabilities in the Company's billing system at
19 approximately \$160,000, which the Company proposed to recover through the
20 Universal Services rider.⁴ Ms. Alexander and Mr. Geller each advocate for

² DLC St. No. 5R, p. 16, line 9 – p. 17, line 22.

³ EGS Parties St. No. 1-R, p. 2, line 8 – p. 5, line 21.

⁴ DLC St. No. 5, p. 18, line 20 – p. 19, line 3.

1 allocating implementation costs to EGSs.⁵ While I stand by the Company's
2 proposal to recover costs through the Universal Services Charge for the reasons I
3 articulated in my rebuttal testimony,⁶ the Company is not opposed to EGSs bearing
4 some portion of implementation costs, provided the recovery mechanism ensures
5 that the Company is made whole. I note that EGSs already bear costs of certain
6 shopping-related customer programs, i.e., the standard offer program. However,
7 requiring EGSs to bear the Company's costs of implementing CAP shopping would
8 likely further chill EGSs' desire to participate. And based on Mr. Kallaher's
9 comments in rebuttal testimony, I am concerned that there may not be enough
10 interest to attain a minimum of five participating EGSs even under the Company's
11 proposed cost allocation.

12 As I indicated in my direct and rebuttal testimony, the Company proposed
13 CAP Shopping based on its understanding of the parties' settlement in the
14 Company's DSP VIII proceeding, as well as the guidance provided in the
15 Commission's Secretarial Letter entered January 23, 2020 at Docket No. M-2019-
16 3007101.⁷ Parties' testimony in this proceeding illuminate legitimate questions
17 regarding whether the Company's CAP shopping proposal should be implemented,
18 even notwithstanding its consistency with applicable Commission guidance. These
19 are ultimately questions for the Commission. The Company intends to abide by the

⁵ CAUSE-PA St. No. 1, p 52, lines 20-22; OCA St. No. 2, p. 20, lines 10-17; OCA St. No. 2-R, p. 3, line 19 – p. 4, line, 14.

⁶ DLC St. No. 5R, p. 18, line 18 – p. 19, line 6.

⁷ DLC St. No. 5, p. 12, line 16 – p. 13, line 19; DLC St. No. 5R, p. 16, lines 6-15.

1 Commission's direction regarding whether to implement CAP Shopping in DSP
2 IX.

3
4 **Q. In her rebuttal testimony, Ms. Alexander discusses the Company's proposal**
5 **regarding the CAP customers' options when their holdover EGS contract**
6 **expires. Were her characterizations of the Company's proposal accurate?**

7 A. No. In responding to the direct testimony of Mr. Kallaher, Ms. Alexander stated
8 that "DLC's proposal to return CAP customers to default service at the end of the
9 contract term with a participating EGS is the reasonable approach to take..."⁸

10 In the interest of clarifying the record, the Company has not proposed to
11 return CAP customers to default service at the conclusion of their holdover EGS
12 contract. To the contrary, at page 14 of my direct testimony, I explained, "At the
13 expiration of a CAP customer's contract with an EGS, the customer may renew the
14 contract with his or her existing EGS at a new program-compliant rate, switch to
15 another supplier offering a program-compliant rate, or return to default service."⁹
16 Thus, the customer's return to default service would not be automatic; it would
17 occur where (1) the customer opted to return to default service, (2) the customer's
18 EGS failed to enroll the customer in a program-compliant rate, or (3) the customer's
19 EGS otherwise stopped serving the customer.

20

⁸ OCA St. No. 2-R, p. 7, lines 12-14.

⁹ DLC St. No. 5, p. 14, lines 11-14.

1 **II. ELECTRIC VEHICLE TIME-OF-USE PILOT PROGRAM**

2 **Q. Do you agree with Ms. Harris's assertion¹⁰ that the collection of demographic**
3 **data recommended by Mr. Geller may deter customers from participating in**
4 **the EV-TOU rate due to privacy concerns?**

5 **A.** Yes, I agree. For this reason and others I discuss in my rebuttal testimony, I do not
6 support requiring customers participating in the EV-TOU rate to submit
7 demographic data.

8

9 **Q. Do you agree with Ms. Harris's proposal¹¹ that the Company collect**
10 **demographic data of commercial and industrial ("C&I") customers?**

11 **A.** No. First, Ms. Harris's proposed categories of "type of customer" data the
12 Company would collect ("workplace, multi-unit dwelling, commercial business,
13 etc."), are vague, overlapping, and difficult to implement uniformly. Additionally,
14 the Company does not systematically collect the types of C&I customer data Ms.
15 Harris cites, so the Company would need to implement a new process to request
16 them from customers. The added Company and customer burden of requiring
17 demographic data presents an unnecessary barrier for C&I customers to participate
18 in the EV-TOU rate.

19

20 **III. RESIDENTIAL CUSTOMER BILLING**

¹⁰ NRDC St. No. 1-R, p. 8, line 19 – p. 9, line 4.

¹¹ NRDC St. No. 1-R, p. 9, lines 6-9.

1 **Q. What are Ms. Alexander’s concerns regarding the presentation of charges**
2 **from bill-ready suppliers on Duquesne’s residential bill?**

3 A. Ms. Alexander references Mr. Geller’s direct testimony where he raised concerns
4 that specifically pertain to charges from bill-ready suppliers.¹² Both Mr. Geller and
5 Ms. Alexander are concerned about the potential for non-basic charges to be
6 included on the bill, effectively included in the bill-ready amount that is transmitted
7 by the supplier. I responded to this concern in my rebuttal testimony.¹³

8
9 **Q. Are there other concerns pertaining to bill-ready billing that you wish to**
10 **address?**

11 A. Yes. Both Mr. Geller and Ms. Alexander reiterate the need for customers to be able
12 to compare their current supply price with the price-to-compare, regardless of
13 whether the customer’s supplier delivers bill-ready or rate-ready charges to
14 Duquesne.¹⁴ To the extent that suppliers provide this information, it is included on
15 the bill. Suppliers are asked to provide the cents-per-kWh charge, and when they
16 do so, the rate is clearly displayed on the bill. Suppliers can also provide free-form
17 text for inclusion on the bill to further describe the basis for the charges.

18 Rule 12.1.1 of the Company’s Supplier Coordination Tariff already requires
19 EGSS using consolidated billing to employ pricing plans “based on fixed and
20 variable charges similar to those the Company employs for billing distribution

¹² OCA St. No. 2-R, p. 3, line 18 – p. 5, line 1.

¹³ DLC St. No. 5-R, p. 40, line 2 – p. 41, line 5.

¹⁴ CAUSE-PA St. No. 1, p. 53, lines 13-17; OCA St. No. 2-R, p. 5, lines 11-14.

1 service and default service.” To ensure that these pricing plans are clearly
2 represented on customer bills, the Company proposes to clarify its tariff to
3 expressly provide that EGSs using bill-ready billing for residential customers will
4 include unitized pricing information for electric supply charges. This information
5 would then be displayed on customer bills. EGSs could supply this information
6 either as a simple per-kWh rate, for conventionally-priced supply, or as part of the
7 free-form text included on the bill; e.g., for dynamic pricing structures that may not
8 lend themselves to being displayed on a fixed dollars-per-kWh basis.

9 To memorialize this change, the Company will amend rule 12.1.6 of its
10 Supplier Coordination tariff as follows:

11 12.1.6 EGS BILLING DATA

12 The EGS shall provide all necessary data in its possession for the
13 timely computation of bills. **Where the EGS uses bill-ready billing**
14 **for residential customers taking basic electric supply service, the**
15 **EGS shall provide electric supply charges in actual dollars or**
16 **cents per kWh, average dollars or cents per kWh, and/or flat**
17 **monthly charge(s).** A failure of the EGS to provide necessary data
18 to the Company in a timely fashion may delay generation of a bill
19 for the month to which the data pertains. In such instances, the EGS
20 is responsible for all fines and violations, if any, arising as a
21 consequence of the Company’s inability to render a timely bill.
22

23 This proposal maintains EGS flexibility to offer innovative pricing
24 structures through bill-ready billing (within the existing limitations provided by
25 Rule 12.1.1), while ensuring that these pricing structures are clearly communicated
26 to customers.
27

1 **Q. Mr. Geller discusses Supplier Consolidated Billing (SCB) in his rebuttal**
2 **testimony, in response to a suggestion from Mr. Kallaher in his direct**
3 **testimony. Please summarize Mr. Geller's concern.**

4 **A.** Mr. Geller is not supportive of SCB; he outlined several reasons in his rebuttal
5 testimony:

6 [A]doption of SCB would only make it more difficult for consumers
7 to compare supplier prices against the price to compare or to access
8 critical statutory and regulatory consumer protections through
9 Chapters 14 and 15 of the Public Utility Code and Chapter 56 of the
10 Commission's regulations.¹⁵

11 and

12 ...SCB is inconsistent with the Choice Act; circumvents the
13 requirements of Chapter 14 and 15 of the Public Utility Code and
14 Chapter 56 of the Commission's regulations regarding residential
15 customer billing, credit, and collections standards; harms
16 competition; is incompatible with critical universal services
17 programs; would harm vulnerable residential ratepayers; and is cost-
18 prohibitive.¹⁶

19

20 **Q. Do you agree with Mr. Geller's position?**

21 **A.** I do. I understand that the Commission is considering SCB in other proceedings, so
22 I have not previously addressed it in my testimony. But to the extent SCB is at issue
23 in this proceeding, I would oppose its adoption.

24

25 **Q. Does this conclude your surrebuttal testimony?**

26 **A.** Yes, it does.

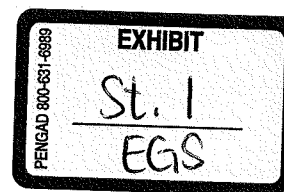
¹⁵ CAUSE-PA St. No. 1-R, p. 6, lines 8-11.

¹⁶ CAUSE-PA St. No. 1-R, p. 7, lines 1-4.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :
for Approval of a Default Service Plan for the : Docket No. P-2020-3019522
Period June 1, 2021, through May 31, 2025 :

**DIRECT TESTIMONY
OF CHRISTOPHER H. KALLAHER
ON BEHALF OF INTERSTATE GAS SUPPLY, INC.,
SHIPLEY CHOICE LLC, NRG ENERGY, INC., VISTRA ENERGY CORP.,
ENGIE RESOURCES LLC., WGL ENERGY SERVICES, INC.,
AND DIRECT ENERGY SERVICES, LLC**



EGS Parties' Statement No. 1
July 17, 2020

1 **I. INTRODUCTION**

2 **Q. Please state your name for the record.**

3 A. Christopher H. Kallaher

4

5 **Q. Please state your title and company you work for?**

6 A. I work for Direct Energy, which includes the affiliates Direct Energy Services, LLC, Direct
7 Energy Business, LLC, and Direct Energy Marketing Limited. My title is Senior Director,
8 Government and Regulatory Affairs.

9

10 **Q. What is your business address?**

11 A. 162 Cypress Street, Brookline, Massachusetts 02445.

12

13 **Q. Have you previously testified before the Pennsylvania Public Utility Commission**
14 **previously?**

15 A. Yes, I have. I testified in a number of default service and other proceedings. A list of
16 Commission proceedings is attached as Appendix A.

17

18 **Q. Have you provided testimony in utility regulatory proceedings in other states?**

19 A. Yes. I have testified in utility regulatory proceedings before the Massachusetts Department
20 of Public Utilities, the Connecticut Public Utilities Regulatory Authority, and the Maryland
21 Public Service Commission.

22

23

1 **Q. On whose behalf are you testifying?**

2 A. I am testifying on behalf of a coalition of EGSs that includes Direct Energy Services,
3 Interstate Gas Supply, Inc., Shipley Choice LLC, NRG Energy, Inc, Vistra Energy Corp.,
4 ENGIE Resources LLC., and WGL Energy Services, Inc.

5
6 **Q. Briefly describe your educational experience and relevant qualifications.**

7 A. Since graduating from law school in 1988, my career has focused on the regulation of
8 public utilities and competitive energy and telecommunications companies. As a lawyer
9 in private practice, I represented investor-owned electric and natural gas utilities,
10 competitive electricity and natural gas suppliers, cable companies, and competitive
11 telecommunications companies in Wisconsin, Massachusetts, Connecticut and New York.
12 I worked for the Massachusetts Department of Public Utilities (then the Department of
13 Telecommunications and Energy) during the passage and implementation of the
14 Massachusetts Electric Restructuring Act of 1997 and the Federal Telecommunications Act
15 of 1996. In the 16 years I have spent working directly for competitive entities, which
16 includes 14 years at Direct Energy, I have worked on issues related to restructured
17 electricity and natural gas markets in a number of states and provinces. My work in
18 Pennsylvania includes extensive involvement in PECO's Default Service Plan, the merger
19 between FirstEnergy and Allegheny Power (which was approved by the Commission in
20 2011), and the Retail Markets Investigation in 2011 and 2012. I have a degree in civil
21 engineering from Stanford University and a law degree from the University of Wisconsin
22 at Madison.

23

1 **Q. What is the purpose of your Direct Testimony in this proceeding?**

2 A. The purpose of my direct testimony is to provide the Commission with the views of the
3 Electric Generation Supplier ("EGS") Parties on various aspects of Duquesne Light
4 Company's ("DLC") Default Service Plan for the period June 1, 2021 through May 31,
5 2025. My direct testimony addresses the following issues:

6 a. I offer some general observations regarding the direction of the competitive retail
7 market in Duquesne's service territory and what that means for this iteration of the
8 DSP.

9 b. Duquesne's failure to address recent FERC orders regarding PJM's Minimum Price
10 Offer Rule ("MOPR").

11 c. Improvements to Duquesne's standard offer program ("SOP").

12 d. Modifications to Duquesne's proposed standard offer program for customers in its
13 Customer Assistance Program ("CAP").

14 e. Duquesne's proposal to enter into a long-term power purchase agreement ("PPA")
15 with a utility-scale solar facility as a means of acquiring solar renewable energy
16 credits ("SREC") and energy.

17 f. Duquesne's proposed Time of Use EV ("TOU EV") charging tariff rate.

18 g. Recovery of Network Integration Transmission Service costs ("NITS").

19

20 **Q. Do you have recommendations for the Commission to consider on each of these**
21 **topics?**

22 A. Yes. I recommend that the Commission:

- 1 (1) Direct Duquesne to make a supplemental filing demonstrating that its default
2 service plan is not a "state subsidy" for purposes of the FERC MOPR rule;
- 3 (2) Revise the Duquesne standard offer program to require that new and moving
4 customers choose among several options for service from an EGS rather than
5 default service;
- 6 (3) Modify Duquesne's proposal for CAP shopping to allow for more meaningful
7 participation by EGSs;
- 8 (4) Provisionally reject Duquesne's proposal to enter into a long-term PPA with a solar
9 facility for the purchase of SRECs, energy and, possibly, capacity and ancillary
10 services;
- 11 (5) Reject Duquesne's proposal for an electric vehicle-specific time-of-use rate; and
- 12 (6) Modify Duquesne's method of collecting the costs of network integration
13 transmission service to make it more competitively neutral.

14
15 **II. THE NEED TO LOOK AT THE COMPETITIVE MARKET WITH FRESH EYES**

16 **Q. Is it your opinion that the competitive market for electricity in Pennsylvania is**
17 **functioning as was envisioned with the Electricity Generation Customer Choice and**
18 **Competition Act, 28 Pa. C.S. § 2801, et seq., ("Competition Act") was signed into law**
19 **in 1996?**

20 **A. No.**

1 **Q. What do you see as the major divergence from the initial promise of the Competition**
2 **Act?**

3 A. I believe that when the Competition Act was passed 24 years ago the Legislature and other
4 policy makers in Pennsylvania had a reasonable expectation that by the third decade of the
5 next century the electricity market in Pennsylvania would be as dynamic and robust as the
6 markets for other consumer goods and services, especially where the service involved is
7 one used by every citizen and where the total market opportunity is so material. This has
8 simply not proven to be the case. By any reasonable measure of a market's success, the
9 electricity market in Pennsylvania generally, and the Duquesne service territory
10 specifically, is in stagnation at best, in decline at worst. For example, out of about 540,000
11 residential customers in the Duquesne service territory, only about 148,000, or 27.5
12 percent, are taking service from an EGS. Yes, it's true that about 67 percent of the total
13 load is being served by EGSs, but that includes the C&I sector, which is served
14 overwhelmingly by EGSs. In the mass market, after 24 years of "competition," the
15 dominant player by far remains the DSP, which is the commodity arm of the monopoly
16 distribution company. That fact alone – continued dominance of the mass market by the
17 former vertically-integrated monopoly – is a sign of a market that is not well, and the fact
18 that the market is not well shows up in nearly every aspect of the operation of the mass
19 market. Billing and collections are still done through the utility. EGS prices are compared
20 to and, in some instances, capped by default service rates. Product innovation in the mass
21 market sector has been virtually nonexistent, despite the presence of widespread smart
22 meter deployment for the better part of ten years.

23
24

1 **Q. What is the cause of this divergence?**

2
3 A. The reasons are the structural flaws in the design of the retail market, which after an initial
4 burst of enthusiasm and investment, have left it only a shadow of what it could be. The
5 Wind Solar Alliance Report released earlier this year explores these flaws at some length.¹
6 They boil down to the presence of a domineering default service provider (“DSP”) and a
7 persistently unlevel playing field between the DSP and EGSs. That unlevel playing field
8 is evinced in the inability of EGSs to have a direct relationship with their customers,
9 through monthly consolidated bills. That unlevel playing field also arises in the persistent
10 cross-subsidization that causes distribution customers, including those who have chosen a
11 product other than Duquesne default service, to nevertheless pay for costs related to
12 Duquesne’s default service. Indeed, the very presence of a DSP that is also the local
13 transmission-and-distribution monopoly—a provider-of-first resort arrangement that has
14 come to be accepted as inevitable, even though it was not inevitable in the design the
15 authors of Pennsylvania’s competition statute conceived—biases customers toward the
16 entity that physically meters them and bills them.

17
18 **Q. What are the negative consequences of this?**

19 A. The negative consequences are several. The Wind Solar Alliance Report focuses on one,
20 namely the lack of long-term contracts that are signed to supply customers in Pennsylvania
21 and other states that have a similar, domineering DSP. Simply put, EGSs are reluctant to

¹ Rob Gramlich & Frank Lacey, “Who’s the Buyer: Retail Electric Market Structure Reforms in Support of Resource Adequacy and Clean Energy Deployment,” *Grid Strategies* (prepared for Wind Solar Alliance) (March 2020). (“Wind Solar Alliance Report”).
<https://windsolaralliance.org/wp-content/uploads/2020/03/WSA-Retail-Structure-Contracting-FINAL.pdf>

1 make longer term investments in the market if its main competition—the DSP—both
2 dominates the market by a default arrangement that consistently directs customers back to
3 it and enjoys a regulatory model of assured cost recovery. For an EGS that must work to
4 earn its customers and stake its own capital at risk, the model is not a feasible one to drive
5 meaningful investments over the long term. In the presence of a dominant utility DSP, the
6 EGS market is destined primarily to consist of shorter-run arrangements that aim only to
7 undercut the DSP. Likewise, without the ability to bill its customers directly, EGSs are put
8 at a disadvantage in establishing meaningful, long-term relationships with their
9 customers—further undermining the case for long-term investments and damaging the
10 prospects of offering innovative products that cannot be conveyed in the small space that
11 EGSs are afforded on Duquesne's bill.

12 Ironically, these negative developments then invite further tinkering with the default
13 service to solve what the market does not seem to be offering. In this proceeding, Duquesne
14 has proposed an electric vehicle-specific time-of-use rate and a long-term solar purchase –
15 things that a well-designed competitive retail market can amply provide. As the Wind
16 Solar Alliance scorecard for Pennsylvania suggests, there is much room for improvement.
17 In my testimony, I propose several improvements in line with those detailed in that report.

18
19 **Q. But isn't investment in generation occurring in Pennsylvania and throughout PJM?**

20 **A.** Yes. But those investments are mostly a function of wholesale market design, including
21 PJM's regional capacity market, where market administrators forecast forward demand and
22 hold a competitive auction to procure it. Ideally, much of the heavy lifting currently left to
23 the PJM capacity auction would instead be done by a diverse group of buyers seeking to

1 cover their retail positions. In the highly competitive Texas market, for example, only 10-
2 20% of total energy volumes transacted in the wholesale ERCOT market were unhedged
3 by a bilateral contract. This demonstrates that in a truly competitive retail market, a
4 significant incentive faces EGSs to cover the positions they are contractually obligated to
5 serve, or that they expect to serve in the future given expectations of their market share.
6 This obligation drives investment in generating resources and, in particular, creates a
7 virtuous cycle for renewable development, as many of those hedges take the form of
8 renewable power purchase agreements.

9
10 **Q. Are these problem areas likely to self-correct?**

11 A. No, they are not. As noted above, these problems are the opposite of self-correcting. The
12 perceived lack of value in the competitive market, which is driven purely by faulty market
13 design, invites proposed revisions to the market that exacerbate the underlying flaws in the
14 market design. A perfect example of this is the treatment of CAP customers. The
15 perception that the competitive market does not deliver fair prices leads either to the
16 exclusion of those customers from the market or restrictions that limit their participation to
17 products that do not exceed the default rate. This perception is rooted in the incorrect
18 notion, which has been promoted by utilities and regulators alike, that the default service
19 price is a reasonable proxy for a "market price", which it clearly is not. These measures
20 further undermine confidence in the market and perpetuate the fallacy that the monopoly
21 delivery utility's subsidized commodity offering is the only fair price in the market. I
22 would like to note at this point that I do not attribute these trends solely or even
23 predominantly to an anti-market animus on the part of Duquesne Light Company. If

1 anything, Duquesne, which owns no generation and has no competitive retail or wholesale
2 affiliate, maintains a position in the Pennsylvania electric market that is less conflicted than
3 other Pennsylvania EDCs. Yet even in the absence of such obvious conflicts, competition
4 is no healthier in the Duquesne service territory than it is elsewhere in Pennsylvania. I
5 believe Duquesne is simply responding to the signals sent by a suboptimal market design
6 and the result is a competitive electricity market that is falling woefully short of its potential
7 to deliver value and innovation to the customers in the Duquesne service territory.

8
9 **Q. Do you have any recommendations for a path forward?**

10 A. Yes. As summarized above, I recommend that the Commission take certain actions that
11 both limit the potential damage to the competitive market that would be done by some of
12 Duquesne's proposals, and that position the market for an eventual transition away from
13 relying on utility-provided default service as the dominant provider for the mass market.
14 Thus, I recommend that the Commission: (1) direct Duquesne to make a supplemental
15 filing demonstrating that its default service plan is not a "state subsidy" for purposes of the
16 FERC MOPR rule; (2) revise the Duquesne standard offer program to require that new and
17 moving customers choose among several options for service from an EGS rather than
18 default service; (3) modify Duquesne's proposal for CAP shopping to allow for more
19 meaningful participation by EGSs; (4) provisionally reject Duquesne's proposal to enter
20 into a long-term PPA with a solar facility for the purchase of SRECs, energy and, possibly,
21 capacity and ancillary services; (5) reject Duquesne's proposal for an electric vehicle-
22 specific time-of-use rate; and (6) modify Duquesne's method of collecting the costs of
23 network integration transmission service to make it more competitively neutral.

1 **III. COMMENTS ON THE STATUS OF DUQUESNE'S DSP WITH RESPECT TO THE**
2 **FERC MOPR ORDER**

3 **Q. Do you have any comments about Duquesne's default service plan as it may be**
4 **affected by FERC's order establishing a minimum offer price for certain resources**
5 **that may be receiving a state subsidy?**

6 A. Yes, I do. From my review of the plan, it appears that Duquesne has not addressed the
7 critical matter of the possible application of the minimum offer price rule to state default
8 service auctions such as those used by Duquesne to source supply for its default service
9 product.² This is somewhat understandable, given that the issue has not been completely
10 resolved by FERC and because FERC has yet to approve PJM's compliance filing. But
11 this much is clear: In its April 26, 2020 Order on Rehearing and Clarification,³ FERC held
12 that state default service auctions meet the definition of "State Subsidy" to the extent they
13 constitute:

14 [A] payment or other financial benefit that is a result of a state-sponsored
15 or state-mandated process and the payment or financial benefit is derived
16 from or connected to the procurement of electricity or electric generation
17 capacity sold at wholesale, or an attribute of the generation process for
18 electricity or electric generation capacity sold at wholesale, or will support
19 the construction, development, or operation of a capacity resource, or could
20 have the effect of allowing a resource to clear in any PJM auction.⁴

21
22
23 **Q. Did PJM respond to this portion of the April 26 Order in its recent compliance filing?**
24
25
26

² *PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,239 (2019).

³ *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,035 (2020) ("April 26 Order").

⁴ April 16 Order at P 386.

1 A. Yes. PJM gave this issue extensive treatment in its filing.⁵ Among other things, PJM
2 described the unintended consequences that could result should contracts entered into as a
3 result of the application of the MOPR to state default service auctions:

4 In the case where independent third parties voluntarily contract with the
5 power marketer with a state default service obligation, any Capacity
6 Resources that contract with such power marketer may also indirectly
7 receive revenues from the default service auction awards, because the power
8 marketer may not distinguish which MWs are used to satisfy state default
9 service obligations and which are used to serve other load requirements. In
10 short, a power marketer that offers into a state default service auction and
11 wins an award to serve retail load could potentially implicate any Capacity
12 Resource with which it contracts simply because it has a state retail service
13 obligation. Consequently, absent care in drafting the revised definition to
14 comply with the April 16 Order, a blanket inclusion of all payments from
15 state default service auctions in the definition of State Subsidy could mean
16 that nearly all PJM Capacity Resources would be subject to the MOPR.
17 Under such a reading of the April 16 Order, almost every Capacity Resource
18 in PJM could be forced into the resource-specific exception process,
19 imposing an immense, unintended, and unreasonable administrative burden
20 on PJM and Capacity Market Sellers.

21 Moreover, under an unintentionally over-inclusive revised definition of
22 State Subsidy, Capacity Market Sellers would not know they fall under that
23 definition when they submit their Sell Offers into a BRA because, to PJM's
24 knowledge, all state default service auctions in the PJM Region are typically
25 conducted after the BRA. Even worse, an overly broad reading of the April
26 16 Order in this manner would mean that such Capacity Resources with no
27 other form of State Subsidy could potentially be subject to the asset life ban
28 and/or capacity revenue forfeiture provisions simply because the Capacity
29 Market Seller did not certify that the resource is a Capacity Resource with
30 State Subsidy, but provided supply (directly or indirectly) to a default
31 service award winner. Such an expansive reach of the MOPR to effectively
32 sweep in all Capacity Resources that supply to an entity that was awarded a
33 state default service obligation could paralyze the voluntary bilateral
34 markets as they exist today.⁶
35

⁵ PJM's Second Compliance Filing Concerning Application of the Minimum Offer Price Rule, Docket Nos. EL16-49, ER18-1314, and EL18-178 (June 1, 2020) ("Second Compliance Filing"), at pp. 15-21.

⁶ Second Compliance Filing at pp. 17-18.

1 To avoid these unintended consequences, PJM proposed a revised definition of "State
2 Subsidy" that would "not encompass transactions or obligations associated with a state
3 default service auction where the underlying state auction is competitive and resource-
4 neutral."⁷ This revised definition is set forth in the proposed revised tariff and includes
5 this new language:

6 For purposes of subsection (e) of this definition, a state default procurement
7 auction that has been certified to be a result of a non-discriminatory and
8 competitive bidding process shall:

9
10 (i) have no conditions based on the ownership (except supplier
11 diversity requirements or limits), location (except to meet PJM
12 deliverability requirements), affiliation, fuel type, technology, or
13 emissions of any resources or supply (except state-mandated
14 renewable portfolio standards for which Capacity Resources are
15 separately subject to the minimum offer price rule or eligible for an
16 exemption);

17
18 (ii) result in contracts between an Entity Providing Supply Services
19 to Default Retail Service Provider and the electric distribution
20 company for a retail default generation supply product and none of
21 those contracts require that the retail obligation be sourced from any
22 specific Capacity Resource or resource type as set forth in
23 subsection (i) above; and

24
25 (iii) establish market-based compensation for a retail default
26 generation supply product that retail customers can avoid paying for
27 by obtaining supply from a competitive retail supplier of their
28 choice.

29
30
31 **Q. What implications, if any, does this proposed revision to the PJM tariff have for
32 Duquesne's default service filing?**

33
34 **A.** It has definite procedural implications and possible substantive ones. With respect to
35 procedure, the Commission should direct Duquesne to supplement its filing to describe
36 with specificity the manner in which its default service program meets PJM's requirements

⁷ Second Compliance Filing at p. 19.

1 for being the “result of a non-discriminatory and competitive bidding process.” The DSP
2 should not be approved without such a finding by the Commission, which must be
3 supported by evidence in the record. To be fair, the filing does include information
4 regarding the competitiveness of the default service procurements proposed therein.
5 However, neither the Commission nor other parties to the case should have to make the
6 positive case for the DSP’s compliance with PJM’s requirements; Duquesne should make
7 that case itself in a supplemental filing. On a substantive basis, I have serious concerns
8 regarding whether the DSP as proposed can meet the requirement that it “establish market-
9 based compensation for a retail default generation supply product that retail customers can
10 avoid paying for by obtaining supply from a competitive retail supplier of their choice.”
11

12 **Q. What are your concerns in this regard?**

13 A. I have two concerns. One is that the DSP proposes to limit the ability of certain customers
14 (namely CAP customers) from the retail choice market unless they take service from an
15 EGS on a product the price of which never exceeds the default service rate. Because I
16 believe the default service rate is subsidized by the inclusion of retail costs in Duquesne’s
17 delivery rates, conditioning the access of any group of customers on a requirement that the
18 product they buy not exceed the default service rate effectively deprives those customers
19 of the ability to avoid the default service supply costs by holding them captive to the default
20 rate. This concern is a subset of my broader concern, which is that the pricing of default
21 service does not, in fact, “establish market-based compensation” for that product, and those
22 concerns continue with respect to this filing. Truly “market-based” compensation would
23 be established through a market mechanism such as a retail auction, which Duquesne does

1 not use for its retail default service product. Rather, Duquesne takes an estimate of the
2 wholesale costs incurred to provide default service and passes those costs through to retail
3 customers with little attempt to include retail cost components that the EGS competitors of
4 default service incur when providing retail electric service in the Duquesne service
5 territory. It is one thing for the Commission to reject requests from EGSs to include these
6 retail costs in default service rates as a matter of state policy, regardless of how misguided
7 EGSs might believe those decisions to be. While these concerns may not have been what
8 FERC directly intended to address in its April 16 Order, the standard of market-based
9 compensation nevertheless makes it imperative for Duquesne, other stakeholders and,
10 ultimately the Commission to examine this issue carefully in light of the need to avoid
11 having suboptimal state policy result in the unintended consequences of the application of
12 the MOPR rules to default service auctions that PJM is attempting to avoid.⁸

13
14 **IV. Improving Duquesne's Proposed SOP plan.**

15 **Q. Has Duquesne proposed any changes to its Standard Offer Program?**

16 A. Yes. The main change proposed by Duquesne is to move the administration of its SOP
17 from internal resources to an external vendor, in this case a company called AllConnect.
18
19
20

⁸ I also acknowledge that the Commission has sought limited rehearing from FERC with respect to the issue of default service as a state subsidy. Request for Limited Rehearing of the Pennsylvania Public Utility Commission, Docket Nos. EL16-49, ER18-1314, and EL18-178 (May 18, 2020). Until that portion of the April 26 Order is modified or vacated, however, the Commission should direct utilities to address the issue in their default service plans.

1 **Q. Do you support this proposed change to the SOP?**

2 A. Yes, I do. As described by Ms. Scholl in her testimony, it appears that EDCs that use a
3 third-party administrator for their SOP have both a higher referral rate and a higher referral-
4 to-enrollment rate than Duquesne has seen using its own customer service representatives
5 to administer the program.

6

7 **Q. Do you recommend any further changes to Duquesne's proposed SOP?**

8 A. Yes, I do. I recommend that new or moving customers calling to initiate service be placed
9 automatically into the SOP.

10

11 **Q. Why do you make this recommendation?**

12 A. The treatment of new and moving customers in competitive energy markets is a concern of
13 long standing. In most states with a hybrid form of competition, in which the distribution
14 utility competes with non-utility retailers for commodity sales, new and moving customers
15 are required to be placed on the utility's commodity service when they contact the utility
16 to initiate distribution service. The "tying" of a utility's commodity service to its monopoly
17 distribution service in that manner could raise antitrust concerns.⁹ Even if it is not
18 unlawful, the constant replenishment of the default service customer base by placing new
19 and moving customers on the utility's commodity service puts EGSs at a competitive
20 disadvantage. Moving to a new home or opening a new location for a business is a time
21 when customers typically consider new options for the goods and services they buy on a

⁹ See, e.g., *U.S. v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (considering legality of tying the purchase of Microsoft's web browser to its operating system).

1 regular basis. The very low rate of referral among Duquesne customers illustrates this
2 disadvantage.¹⁰

3 The simple solution for this is to start all new and moving customers off on competitive
4 supply with an EGS. Duquesne's choice of AllConnect as its third-party administrator for
5 the SOP provides an excellent opportunity to do just that. As Ms. Scholl notes, AllConnect
6 is already providing referral services to Duquesne's new and moving customers for other
7 services, like television and Internet. They are well-positioned to offer a robust alternative
8 to the proposed SOP for new and moving customers. In fact, I see no reason to limit the
9 EGS options offered by AllConnect to new and moving customers just to the SOP. New
10 and moving customers can and should be offered a wide range of EGS options; that is
11 exactly what AllConnect does for providers of television and Internet.¹¹ For a random
12 Pittsburgh address, AllConnect displayed three offers for Internet service and five offers
13 for television service. It would be a simple thing for AllConnect to present new and moving
14 customers with some number of options for electric service as part of the enrollment
15 process for Duquesne's delivery service. There is no justification for continuing to place
16 the majority of new and moving customers on default service while offering a choice of an
17 EGS only as an afterthought.

18
19
20

¹⁰ While it is the case that Ms. Scholl's testimony did not distinguish the referral rate for new and moving customers from the referral rate for others, my assumption is that the overall low rate of referral – eight percent of customers offered the opportunity chose to be transferred to hear the referral offer – indicates a similarly low rate for new and moving customers.

¹¹ See, Allconnect.com.

1 **V. CAP Shopping**

2 **Q. Has Duquesne proposed a CAP Shopping program?**

3 A. Yes, it has.

4

5 **Q. How is the CAP Shopping program structured?**

6 A. My understanding of the Duquesne program is that it will consist mainly of limitations in
7 the pricing and terms under which EGSs can service CAP customers. Specifically, CAP
8 customers will be allowed to take service from an EGS, but only provided the EGS's price
9 never exceeds the Duquesne default service rate and provided further that the EGS contract
10 not allow for fees unrelated to the provision of electric generation service, such as early
11 termination and cancellation fees. Moreover, as described in Ms. Scholl's testimony, "[a]t
12 the expiration of a CAP customer's contract with an EGS, the customer may renew the
13 contract with his or her existing EGS at a new Program-compliant rate, switch to another
14 supplier offering a Program-compliant rate, or return to default service."¹²

15

16 **Q. Does this approach appear to be heading in the correct direction?**

17 A. It is not clear to me whether it is or not. The main point of ambiguity is what happens at
18 the end of the CAP customer's contract in the absence of an affirmative choice by the
19 customer.

20

21 **Q. Are there ways that Duquesne's proposal could be improved?**

22 A. Yes.

¹² Duquesne Statement No. 5 at p. 14, lines 11-14.

1 **Q. Do you have a specific proposal to offer?**

2 A. I have two proposals. The first is that the CAP shopping program be modified to make
3 clear that at the end of the initial contract term, should the customer make no affirmative
4 choice, the customer will continue to be served by his or her existing EGS at a program-
5 compliant price. Given that EGSs would be required to meet or beat the Duquesne PTC,
6 there is no reason not to allow the EGS already serving a CAP customer could continue to
7 do so until the customer affirmatively chooses either to switch to another EGS or to return
8 to default service.

9 Second, it is also not clear to me that CAP customers can participate in the SOP. Provided
10 they are served under the terms applicable to CAP service, there is no reason to prevent
11 CAP customers from participating in the SOP. Thus, I also recommend that the DSP be
12 modified to clarify that CAP customers may participate in the SOP, provided they are
13 served on a CAP-compliant product by the participating EGS.

14

15 **VI. Time of Use – Electric Vehicle Rate**

16 **Q. What is Duquesne proposing regarding a time of use rate for Electric Vehicles?**

17 A. Duquesne is proposing a time of use rate for the charging of electric vehicles. The energy
18 to be used for this purpose will not be separately procured, but rather, will simply be
19 purchased as part of the ordinary auction process. The prices for the various time intervals
20 will be based on certain percentages applied to the existing price to compare. Duquesne
21 will verify that a customer has appropriate charging equipment and owns an appropriate
22 vehicle as part of the sign-up process.

23

1 **Q. Do you have any concerns about this program?**

2 A. Yes, I have several concerns. First, it appears that Duquesne has short-circuited what was
3 intended to be a more robust collaboration among stakeholders regarding the possible
4 development of TOU rates for EVs. The January 23, 2020 Secretarial Letter closing
5 *Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms*,
6 Docket Docket M-2019-3007101, the Commission issued the following guidance with
7 respect to the possible development of TOU rates for EVs:

8 The commenters all agreed that the TOU programs should be voluntary and that
9 Act 129 specifies that an EDC's TOU program should be optional for customers on
10 default service. Consumer representatives stressed that residential, especially
11 low-income customers, electricity consumption is not as adaptable to TOU rates as
12 are larger commercial customers. OCA asserts that it has been difficult for EDCs
13 to offer TOU rates that have achieved anything resembling broad acceptance by
14 residential customers. Exelon stated that it is difficult to implement TOU structures
15 seamlessly for default service supply, and that default service costs, and risk
16 premiums are influenced by a supplier's ability to forecast load. RESA, CAC and
17 OCA agree that customers who desire something other than plain vanilla default
18 rates should shop and obtain those products from EGSs. The OCA, however,
19 recognizes the need to comprehensively address emerging issues related to
20 increased electric vehicle (EV) penetration, such as EV sub-metering and
21 time-sensitive pricing for EV charging.

22
23 The Commission acknowledges the past difficulties of implementing TOU rates in
24 a default service context. However, looking forward, we agree with the OCA that
25 as EV usage and distributed energy deployment increase in the coming decades,
26 TOU rates should be considered. While the adoption rate of EVs is a matter of
27 speculation, it is indisputable that during the timeframe covered by the upcoming
28 DSP's, EV use will increase. With that said, we find that TOU rates, especially in
29 the context of EV expansion, needs to be explored further, especially whether the
30 lack of TOU rate offerings for operators of EVs presents a barrier to EV adoption.
31 **Accordingly, we urge all parties participating in the upcoming DSP**
32 **proceedings to consider how EV specific TOU rate offerings could be made**
33 **available to consumers.**¹³
34

¹³ Secretarial Letter at pp. 6-7 (footnote omitted, emphasis added).

1 In Ms. Scholl's testimony, she characterizes this directive as "encourag[ing] EDCs to adopt
2 EV-TOU rates."¹⁴ Considering how to make EV specific TOU rate offerings available to
3 consumers is not the same as encouraging EDCs to be the entities providing those rates.
4 Thus, my first concern is one of process. I would have preferred to have seen Duquesne
5 reach out to other stakeholders in the three months between the issuance of the Secretarial
6 Letter and the filing of Duquesne's DSP to discuss possible approaches to providing
7 consumer with EV TOU rates. Instead, Duquesne chose to do it themselves, without any
8 evidence that there were other options available that would have made use of the
9 competitive market rather than circumventing it.

10 My second concern is that the Duquesne proposal will, in fact, have a strongly negative
11 impact on the continued development of the competitive market in Pennsylvania. I raised
12 this broader issue in my introductory comments, and this is a specific example of that trend.
13 One can see where this approach to new developments in energy markets would lead: some
14 innovative technology begins to take hold, the Commission expresses interest in ensuring
15 that is made available to consumers, and the EDCs step in to do just that, on a completely
16 cost-of-service, command and control basis, even in the absence of evidence that the
17 market will not respond in due time to demand for the new product, or that other barriers
18 that might be slowing the development of competitive options should be removed before
19 turning to the EDCs. Yet, rather than make the case for the need for the EDCs to intervene
20 in such a clearly nascent market (in 2018, EVs accounted for a little less than 1 percent of
21 vehicle sales in Pennsylvania), Ms. Scholl's testimony simply makes the case for EVs
22 generally, which no one disputes. Moreover, Duquesne also skipped over an even earlier

¹⁴ Statement No. 5 at p. 20.

1 step in the inquiry envisioned in the Secretarial Letter: "With that said, we find that TOU
2 rates, especially in the context of EV expansion, needs to be explored further, especially
3 whether the lack of TOU rate offerings for operators of EVs presents a barrier to EV
4 adoption." As of January 23 of this year, it was not even clear to the Commission that the
5 absence of TOU rate offerings was a barrier to EV adoption.
6

7 **Q. Will this program impede suppliers who may already offer such programs or be**
8 **planning such programs?**

9 A. Absolutely. As noted, the market for EVs and secondary parts of that market such as EV-
10 specific TOU rates, is clearly only just beginning to take shape in Pennsylvania. If EGSs
11 and other entities that may be interested in addressing the needs of the small but growing
12 EV market see that the EDCs are already moving to dominate this market with cost-of-
13 service options that leverage default service rates that EGSs see as already being subsidized
14 by delivery rates, there is no question that some potential competitors will look at other
15 states for opportunities, leaving Pennsylvania residents with fewer options than they would
16 otherwise have.
17

18 **Q. Do you have a specific proposal with respect to EV-specific TOU rates?**

19 A. I have two proposals. Ideally, Duquesne would convene a working group of interested
20 stakeholders to examine the issues raised in the Secretarial Letter with respect to EV-
21 specific TOUs. These issues would include: (1) whether the absence of EV-specific TOU
22 rates is, in fact, a barrier to EV adoption in Pennsylvania; (2) if so, what is the cause of the
23 absence of EV-specific TOU rates; and (3) what steps should be taken to overcome those

1 barriers to the development of EV-specific TOU rates without stifling the development of
2 the competitive market in this area? At the conclusion of this process, should the working
3 group recommend further action on Duquesne's part, Duquesne would make a compliance
4 filing laying out its plan for accomplishing the recommended action.

5 The second proposal would be for Duquesne to issue an RFI for proposals from competitive
6 entities to enhance the development of the EV market in Duquesne's service territory, using
7 measures that could be implemented within the scope of Duquesne's DSP. This process
8 could be thought of as potentially getting to the same result as the first proposal, only much
9 quicker. The second largest automaker in the world right now by market capitalization,
10 with a capitalization greater than General Motors and Honda combined, is a company that
11 makes only EVs. It seems inconceivable that there are not plenty of ideas out there for
12 helping to serve the EV market that would make use of innovation and creativity rather
13 than a three-period time-of-use rate that would likely do little other than stifle the further
14 development of a market that seems perfectly capable of developing on its own.

15
16 **VII. Duquesne's Solar AEC/Energy PPA Proposal.**

17 **Q. What exactly is Duquesne proposing regarding acquisition of SRECs and solar**
18 **energy?**

19 A. Duquesne has proposed to engage in a competitive process to identify an appropriate
20 "utility-scale" solar project with which it can enter into a power purchase agreement
21 ("PPA") to acquire the SRECs and energy output from the facility for a term not less than
22 four years or more than 20. The SRECS would be used to meet the AEPS requirements
23 for default service load, and the energy acquired via the PPA would be sold into the real-

1 time market, with net revenue being used to offset default service energy costs. Duquesne
2 would assess the possibility of acquiring the capacity and ancillaries associated with the
3 facility; the plan contains no definitive proposal for how those would be treated.
4

5 **Q. Do you see any impacts on the competitive market with this approach?**

6 A. Yes, I do. To be clear, I do not object to long-term contracts generally. It is sometimes
7 rational for a party to enter into one when it is risking its own capital and expects to have
8 load to serve in an economically efficient way over that period of time. In fact, as discussed
9 in my introductory remarks above, greater long-term contracting with renewable facilities
10 is a desirable policy goal that is frustrated by the continued reliance on a hybrid model of
11 competition in which the distribution utility maintains a dominant position in the retail
12 electricity market. In the case of EDCs entering into such contracts, though, I have serious
13 concerns. The program period for this default service plan is four years, which means that
14 a contract as proposed by Duquesne could extend well past the expiration of this plan, and
15 even several subsequent plans, should Duquesne continue to serve in the role of the
16 exclusive DSP in its service territory. While Duquesne has served that role since the
17 expiration of generation rate caps, both the statute and the Commission's regulations
18 contemplate the possibility of the default service provider role being shifted to an
19 alternative default service provider such as an EGS.¹⁵ It would be improper in this
20 proceeding to take any action that either forecloses that possibility or creates future
21 stranded costs that would unduly burden the potential for that important reform.

¹⁵ 66 Pa. C.S. § 2803 ("Default Service Provider"); 52 Pa. Code § 54.183.

1 Moreover, Duquesne's filing does not make the positive case that the solar industry in
2 Pennsylvania needs the kind of support offered by a long-term contract with an EDC. I am
3 aware that the Commission allowed Duquesne to pursue long-term contracting for AECs
4 in its review of the company's DSP VIII, and that efforts to enter into such a contract with
5 a developer (with another entity purchasing the energy, capacity and ancillary services
6 produced by the facility) did not come to fruition. I would have expected that in their next
7 filing Duquesne would provide more detailed information about why they believed their
8 previous efforts at contracting with a solar developer failed, why they believe renewed
9 efforts will be more successful, and what the continuing need is for such an arrangement.
10 Their filing contains little or no evidence on these points. Only Mr. Davis discusses the
11 solar PPA and, on the need for and impact of the proposed contract, he offers only the most
12 conclusory statements.¹⁶

13
14 **Q. Do you see any other potential problems?**

15 A. Yes, I see two further potential problems with this proposal. First, entering into long term
16 contracts, as Duquesne proposes here, places Duquesne's default service ratepayers at risk
17 because they will be required to pay for the costs of contracts that may end up being
18 uneconomic over their life. If there is a case to be made that such a long-term arrangement
19 actually reduces the risks to default service ratepayers, the company's filing did not make
20 it. Certainly, if Duquesne risked its own capital—as do EGSs—on a venture that could
21 result in a profit or loss, then the Commission should be supportive of long-term
22 arrangements, and such a proposal would represent a true commitment on Duquesne's part

¹⁶ Duquesne Statement No. 1, pp. 13-17.

1 to provide a boost to utility-scale solar development in Pennsylvania. The same would be
2 true if any entity wished to enter into such a contract, putting its own capital at risk. Putting
3 someone else's money at risk is more like a gesture than a commitment, and an empty one
4 at that.

5 Second, I also have concerns that this kind of "support" for solar development will create
6 a barrier to more productive opportunities that may be in the offing. These could take the
7 form of solar projects that are currently in development that may pass up terms that are
8 available now in the hopes of contracting with Duquesne instead. But my greatest concern
9 is that pushing for this kind of utility contract will decrease the likelihood of achieving
10 what should be a high priority for all those who support solar power in Pennsylvania, and
11 that is the passage of a bill allowing community solar projects to go forward. I understand
12 and appreciate the general reluctance of utility commissions to take or forbear from taking
13 actions because of the possibility of a change in the organic laws that affect the industries
14 they regulate, but I see this as one of the rare instances in which it would be prudent to do
15 so. As has been shown in states like Massachusetts, New York and Illinois, community
16 solar programs can bring robust solar development while providing consumers with an
17 opportunity to support solar energy even if they are unable to install their own solar facility
18 on their premises. The passage of a bill that would allow community solar would be a boon
19 for the solar industry and Pennsylvania energy consumers, and I would encourage the
20 Commission not to send the signal that it intends to rely on utilities to provide the impetus
21 for solar development rather than more effective, market-oriented solutions.

1 **Q. What is your recommendation regarding this proposal?**

2 A. I recommend that the proposal be put on hold for now, pending two events. First, I would
3 encourage the Commission to direct Duquesne to conduct a working group, similar to my
4 recommendation with respect to an EV-specific TOU rate, to consider the state of solar
5 development in Duquesne's service territory and make recommendations to the
6 Commission with respect to measures that could be adopted to improve the prospects for
7 that development, if any are, in fact, needed. Second, I would encourage the Commission
8 to monitor the legislative session for action on community solar and, should such programs
9 be enabled, to put the Duquesne proposal for a solar PPA on hold until the next default
10 service plan, should there be one.

11

12 **VIII. NITS**

13 **Q. Can you please explain the basis of Network Integration Transmission Services**
14 **charges?**

15 A. As the name implies, NITS is the service that provide energy consumers with access to
16 generation supply throughout the RTO control area in which the customer is located.
17 Customers served by the same distribution utility pay the same rate for this service
18 regardless of where they are located on the system in relation to generation resources. In
19 many utility service areas, including Duquesne, NITS rates are formula-based rates
20 adjusted annually through FERC-approved formula rate filings. This is to account for
21 changes in operating costs, system loads, or cost recovery requirements for new
22 transmission projects. Rates are based on several factors:

- 23
- Transmission Owners Cost of Service

- 1 • Cost of Capital on Rate Base, including allowed Return on Equity and Interest costs
- 2 • Depreciation and Amortization
- 3 • Tax Operation and Maintenance.

4

5 **Q. Are NITS the only PJM charges that have these characteristics?**

6 A. No. There are a number of wholesale cost obligations assessed by PJM that all LSEs are
7 required to pay including: Generation Deactivation/Reliability Must Run charges;
8 Regional Transmission Expansion Plan charges; and, Expansion Cost Recovery charges
9 (collectively, "Other PJM Charges"). NITS and Other PJM Charges are generally referred
10 to a Non-Market Based ("NMB") charges.

11

12 **Q. How are customers charged for NITS?**

13 A. Duquesne's method for calculating and charging NITS is described in the company's tariffs
14 and documents related to its procurement of wholesale power for default service. In
15 calculating the amount of NITS to be charged to a customer, Duquesne must calculate the
16 customer's transmission peak load contribution. This is done in the following manner, as
17 described in Duquesne's tariff, PA P.U.C. No. 3S:

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23

To determine the customer's share of the Network Transmission Service Peak Load, the Company will first calculate the customer's transmission peak load contribution. The transmission peak load contribution is based on the customer's load coincident with Duquesne's transmission system zonal load during the one peak hour of the previous year. For customers that lack sufficient historical load data (e.g., new customers), the Company shall determine the customer's load for

1 purposes of calculating its Network Transmission Service Peak Load Contribution.
2 Second, the customer's load, adjusted for the Company's transmission and
3 distribution line losses and the customer's share of unaccounted for energy (as
4 provided by Rule No. 8 of this tariff), will be the customer's Network Transmission
5 Service Peak Load Contribution.

6 This transmission service peak load contribution, along with the company's FERC-
7 approved NITS rate, will determine the actual amount of NITS charged to the customer in
8 a given year. This amount is charged to the customer through the default service rate in a
9 manner that allows Duquesne to reconcile the cost of the NITS charges with the revenue
10 derived from the amounts billed to and collected from default service customers. NITS are
11 excluded from the charges that wholesale suppliers must account for in bidding to provide
12 supply for the company's default service.

13
14 **Q. Do these charges vary from year to year?**

15 **A.** Yes, they do. Both the FERC-approved NITS rate and the individual customer's Network
16 Transmission Service Peak Load Contribution can and usually do change from year to year.
17 The net result of these changes is that an LSE's NITS obligation on behalf of an individual
18 customer, and its total NITS payment can be difficult to predict, and even more difficult to
19 influence.

1 **Q. DO YOU HAVE EXAMPLES OF ACTUAL IMPACTS TO LSES OF NITS RATES**
2 **INCREASES?**

3 A. Yes. Public Service Enterprise Group (PSEG) filed an annual formula rate update for rate
4 year 2019.¹⁷ PSEG's annual transmission revenue requirement effective January 1, 2019
5 was \$1,194,757,707 (NITS Rate: \$119,735.80/MW-Year). PSEG filed an updated annual
6 revenue requirement on December 5, 2019. For the period beginning January 1, 2020,
7 PSEG's new annual transmission revenue requirement was set at \$1,526,297,808 (NITS
8 Rate: \$156,503.24/MW-Year), a 30.7% increase in the NITS Rate over the previous year.¹⁸
9 Because of the effective date of the new NITS rates, LSEs had approximately a 25-day
10 notice prior to the rate change. That is what I mean when I say that these rates change not
11 just more frequently—on an annual basis—but also more suddenly, with a relatively short
12 lead time. Below are similar increases for the FirstEnergy Companies:¹⁹

¹⁷ Public Service Electric and Gas Company Informational Filing of 2019 Formula Rate Annual Update (Revision) FERC Docket No. ER09-1257 dated January 18, 2019 and available at: <https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15145006>. The original filing for the 2019 Formula Rate Annual Update was dated October 15, 2018 and is available at: <https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15073350>. PSEG filed several revisions to the original filing.

¹⁸ Public Service Electric and Gas Company Informational Filing of 2020 Formula Rate Annual Update (Second Revision) FERC Docket No. ER09-1257 dated January 17, 2020 and available at: <https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15073350>. The original filing for the 2020 Formula Rate Annual Update was October 15, 2019 and is available at: <https://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=15073350>. PSEG filed several revisions to the original filing.

¹⁹ https://www.firstenergycorp.com/supplierservices/pa/me_pn/NITSRateInformation.html

NITS Rates	Current NITS Rate		Future NITS Rate	
	Current NITS Rate	Effective Dates	Future NITS Rate	Effective Date
ATSI Zone	\$55,074.34/MW/Year	Since January 1, 2019	\$57,340.35/MW/Year	January 1, 2020
Allegheny Power Zone	\$15,396.00/MW/Year	Since March 1, 2002	\$15,396.00/MW/Year	March 1, 2002
MAIT Rates for ME & PN Zones	\$28,796.22/MW/Year	Since January 1, 2019	\$37,083.18/MW/Year	January 1, 2020

1

2 **Q. HAS THE ACTUAL COST OF NITS BEEN INCREASING OVER THE LAST**
 3 **SEVERAL YEARS?**

4 A. Yes, as displayed in the below table.²⁰

NITS Rates (\$/MW-Y)	Jan-20	Jan-19	Jan-18	% Increase Jan 2019 - Jan 2020	% Increase Jan 2018 - Jan 2019
MAIT	\$37,083.18	\$28,796.22	\$26,069.39	28.8	10.5
PPL	\$68,031	\$58,865	\$61,792	15.6	4.7
PSEG	\$156,503.24	\$119,735.80	\$130,535.22	30.7	8.3

5

6

²⁰ Information from <https://www.pjm.com/markets-and-operations/billing-settlements-and-credit.aspx> under the heading "Network Integration Transmission Service Revenue Requirements & Rates."

1 **Q. How does the recovery of these non-market-based charges impact a default service**
2 **customer?**

3 A. The recovery of NITS and other NMBs is done by Duquesne in such a way that default
4 service customers pay the actual cost of those charges, no more and no less. This is because
5 Duquesne passes those charges through to default service customers on a fully reconciling
6 basis.

7

8 **Q. How does a change in NITS charges impact a shopping customer?**

9 A. NITS charges have a serious detrimental effect on how shopping customers engage the
10 market. As noted above, a customer's LSE is responsible for paying NITS on that
11 customer's behalf, and those charges can and do vary from year to year in a way that is
12 difficult or impossible for an LSE to predict or influence. Thus, when a customer takes
13 service from an EGS on a contract that extends across multiple periods during which
14 Duquesne calculates a customer's NITS tag (November 1 to October 31), the EGS must
15 include in its pricing some accounting for a charge that is almost certain to change from
16 one period to the next, usually in an unpredictable fashion. Thus, for example, if a customer
17 signed a contract with an EGS for a fixed-price contract with a term of 24 months that
18 began on July 1, 2018 and expired on June 30, 2020, the contract would span three separate
19 planning years for purposes of Duquesne's NITS charges such that the charges the EGS
20 would have to pay on that customer's behalf would change twice during the term of the
21 contract.

22

23

1 **Q. Does this variability impact an EGSs service to its customers?**

2 A. This variability has a couple of implications for the service EGSs can provide. One is that
3 EGSs may avoid making fixed-price offers to customers due to the risk presented by the
4 variability of NITS charges. This does a disservice to customers who are looking for price
5 certainty against a PTC that changes on a quarterly basis. Another implication is that when
6 an EGS does make fixed-price offers, they will tend to include a risk premium to reflect
7 the likelihood that the customer's share of NITS charges will change and could well
8 increase. The robust competition among EGSs that exists in the Duquesne service territory
9 undoubtedly puts downward pressure on that risk premium, but the net result is that and
10 EGS customer is almost certain to either overpay or underpay for their share of NITS
11 charges. This stands in sharp contrast to default service customers, who pay exactly their
12 share of Duquesne's NITS charges, no more and no less. Considering that these charges
13 are unpredictable, as noted above, and cannot be effectively hedged by EGSs, the result
14 with respect to EGS customers is plainly inefficient, with some customers paying too much
15 and others paying too little based only on the arbitrary factor of their EGS's ability to
16 predict a charge that, by its nature, is unpredictable.²¹

²¹ If anything, the utility is in a better position predict or influence NITS charges for its default service customers than EGSs are for their customers. The utility will have more visibility into its transmission revenue requirements (one of the factors that determine the amount of NITS charges a customer ultimately pays) and how those might change from year to year than do EGSs. Despite this possible advantage over EGSs in forecasting NITS, no Pennsylvania utility takes on the kind of risk that EGSs are required to with respect to NITS charges. They either pass them through directly or shift that risk to wholesale suppliers (in the case of the FirstEnergy utilities), an option that is not effectively available to EGSs. As the monopoly provider of default service in its service territory, a utility is also a monopsony purchaser of wholesale supply for the retail service that is the dominant participant in terms of market share in the residential and small commercial market segments. As the sole purchaser of supply for the leader in market share, the utility can dictate terms to its wholesale suppliers in ways that EGSs simply cannot. So, for example, the FirstEnergy utilities can simply tell wholesale suppliers that they must take on the risk of NITS changes if they

1 **Q. Is there a way to mitigate the negative impact on suppliers?**

2 A. Yes. Duquesne should treat NITS charges just as it treats other NMBs and collect and
3 remit them on behalf of all customers through a nonbypassable charge.

4

5 **Q. Would such a change negatively impact default service customers?**

6 A. It would have no negative impact on default service customers, who would be treated in
7 the same way they are treated now with respect to NITS charges.

8

9 **Q. Would your proposed change harm shopping customers?**

10 A. No, it would not. It is difficult to see any benefit to customers that flows from requiring
11 EGSs to include NITS in their pricing that would be lost by moving NITS to a
12 nonbypassable charge.

13

14 **Q. What are the positive benefits, if any, of your proposal?**

15 A. The positive benefits are several, and all in favor of the customer. Collecting NITS through
16 a nonbypassable charge would eliminate the risk premiums that EGSs must currently
17 include for offers that extend beyond the next change in the utility's NITS calculation.
18 Assuming that EGSs are likely erring on the side of a higher versus lower risk premium to
19 avoid being short, my proposed change would result in shopping customers paying less

want to provide supply for default service, and wholesale suppliers will do just that. Even if EGS made such a demand, wholesale suppliers would not be required to respond positively and, if they did, they are almost certain to include a higher risk premium for an EGS that has a much smaller market share than the utility. Moreover, because of the shorter-term nature of many default service wholesale supply contracts, wholesale suppliers who agree to include NITS charges in their bids do not take on the same level of risk as do EGSs seeking to provide longer-term solutions to their customers.

1 than they do now for NITS. The change would also likely encourage more longer term
2 offers from EGSs, which would also benefit customers looking for price certainty,
3 especially at a time when prices are generally relatively low and stable. In fact, one of the
4 unintended consequences of the current treatment of NITS is that the need for EGSs to take
5 on the risk of a cost like NITS, which cannot be effectively predicted or hedged, tends to
6 reduce the robustness of the offers EGSs can make that manage the risks related to
7 commodity costs, which EGSs are well-placed to predict, hedge and even influence. My
8 proposal would remove that disincentive to provide a broader range of offers. Finally, my
9 proposal would increase overall efficiency by treating NITS as it should be treated, namely
10 as a non-market-based cost that cannot be easily predicted, influence, or hedged and which,
11 thus, should be treated on a pass-through basis for all customers, just as Duquesne treats it
12 now for default service customers.

13

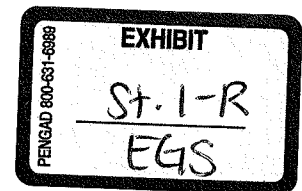
14 **Q. Do you have anything else to add at this time?**

15 A. No. This concludes my Direct Testimony.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :
for Approval of a Default Service Plan for the : Docket No. P-2020-3019522
Period June 1, 2021, through May 31, 2025 :

**REBUTTAL TESTIMONY
OF CHRISTOPHER H. KALLAHER
ON BEHALF OF INTERSTATE GAS SUPPLY, INC.,
SHIPLEY CHOICE LLC, NRG ENERGY, INC., VISTRA ENERGY CORP.,
ENGIE RESOURCES LLC, WGL ENERGY SERVICES, INC.,
AND DIRECT ENERGY SERVICES, LLC**



EGS Parties' Statement No. 1-R
August 14, 2020

1 **Q. Please state your name.**

2 A. Christopher H. Kallaher

3

4 **Q. Are you the same Christopher Kallaher who provided Direct Testimony in this**
5 **proceeding?**

6 A. Yes.

7

8 **Q. What is the purpose of your rebuttal testimony?**

9 A. I will be responding to the following testimony:

- 10 • CAUSE-PA witness Harry Geller on the competitive market generally and the SOP
11 specifically;
- 12 • OCA witness Barbara Alexander on the SOP;
- 13 • NRDC witness Kathleen Harris on the proposed EV-TOU rate; and
- 14 • MAREC witness Elizabeth Stanton.

15

16 **Q. What is your response to Mr. Geller's testimony regarding a comparison of prices**
17 **paid by EGS customers versus default service rates?**

18 A. The bulk of Mr. Geller's conclusions and recommendations to which I will be responding
19 are based on this comparison. This is also the case, but to a far lesser degree, with Ms.
20 Alexander's recommendations, and I will address those separately. Mr. Geller precedes his
21 comments on Duquesne's EV-TOU, SOP, and CAP Shopping Plan proposals with a long
22 discussion of the comparison of EGS prices and default service rates. Much of this
23 discussion is not directly connected to a specific proposal but if I am understanding the gist

1 of Mr. Geller's testimony correctly, he believes that the default service rate is a standard
2 against which EGS prices should be compared for purposes of determining whether a
3 proposal that involves EGSs in any capacity is "just and reasonable." More broadly, it
4 appears that Mr. Geller has concluded that "over the last 10 years, residential consumers
5 continue to fare poorly in the competitive market as a whole." This conclusion also appears
6 to be based, to a great extent, on the comparison of EGS prices and default service rates.¹
7

8 **Q. What is your response to this position?**

9 A. Basing substantive decisions on the conclusion that EGS customers pay more, on average,
10 than they would have paid had they remained on utility default service would be
11 inconsistent with the goals of the Competition Act and would violate both the
12 Commission's enabling statutes and its precedent.
13

14 **Q. In what way is this comparison inconsistent with the goals of the Competition Act?**

15 A. Mr. Geller looks at the differences between EGS prices and default service rates and
16 concludes: "In the face of data like this, it is undeniable that the cost savings anticipated
17 by the Competition Act are not being achieved and that residential customers, as a class,
18 have not fared well in the competitive market over time."² The idea that the Legislature
19 went through the extraordinary step of restructuring the Pennsylvania retail and wholesale
20 electric markets so that at some point in the future customers would be able to buy
21 electricity from competitive retailers at a price less than the rates charged by utilities for

¹ The price comparison is not the only basis for Mr. Geller's concerns with the market. He also cites allegations of poor sales and marketing standards, which I address below.

² CAUSE-PA Statement No. 1 at 13 (emphasis added).

1 the “default” service that would be made available to those who didn’t shop is just plain
2 wrong. The goal of the Competition Act was for customers to save money versus what
3 they would have paid had the vertically-integrated monopoly utility system been allowed
4 to continue.³ There was no default service when the Competition Act was passed. There
5 was a vertically-integrated monopoly system that had delivered poor value to customers
6 for decades in the market for a service – electric generation – that has been shown, fairly
7 conclusively, not to be a natural monopoly. The Legislature could not and did not
8 undertake so extensive a project as electric restructuring with the goal of ensuring
9 “savings” versus a thing that did not exist at the time and, when it was brought into
10 existence by the Act itself, was seen as a mere transitional mechanism between the *status*
11 *quo ante* and an eventual state of the market in which shopping would be the norm.

12 I have seen other stakeholders, including those in the states cited by Mr. Geller in
13 his testimony,⁴ make this erroneous claim, that the goal of electric restructuring was to
14 allow future customers to save money compared to a commodity product that would be
15 provided by the monopoly wires company, and I strongly urge the Commission to reject it,

³ See, e.g., 66 Pa. C.S ss 2802:

(3) Because of advances in electric generation technology and Federal initiatives to encourage greater competition in the wholesale electric market, it is now in the public interest to permit retail customers to obtain direct access to a competitive generation market as long as safe and affordable transmission and distribution service is available at levels of reliability that are currently enjoyed by the citizens and businesses of this Commonwealth.

(4) Rates for electricity in this Commonwealth are on average higher than the national average, and significant differences exist among the rates of Pennsylvania electric utilities.

(5) Competitive market forces are more effective than economic regulation in controlling the cost of generating electricity.

See also, *Indianapolis Power and Light Co. v. Pennsylvania Public Utilities Commission*, 711 A.2d 1071, 1078 (Comm. Ct. 1998): “The purpose of the Competition Act is clear: to relinquish the local utilities’ monopoly control over the generation of electricity and to invite competition in an effort to lower electric generation rates for the citizens of this Commonwealth.”

⁴ CAUSE-PA Statement No. 1, pp. 17-20.

1 in this case and others. This misunderstanding of the purpose of restructuring has
2 contributed greatly to the corrosive effect of default service in the retail market, with a
3 service that was meant to be a "last resort" continuing to be the dominant provider in the
4 mass market many years past the point that those who were present at the time of
5 restructuring anticipated that bundled utility service would be a thing of the past.

6
7 **Q. In what way does this comparison violate the Commission's enabling statutes and**
8 **precedent?**

9 A. This is not necessarily the place for a long discussion of the legal questions that attend the
10 Commission's authority to regulate EGS prices. In fact, many of Mr. Geller's arguments
11 are beyond the scope of this proceeding, which is not a broad-based inquiry into the
12 competitive market and EGS pricing and practices but, rather, considers whether
13 Duquesne's DSP meets the standard for approval. Nonetheless, it is worth pointing out
14 that the Commission does not have the authority to regulate EGS prices. The *Electric*
15 *Generation Customer Choice and Competition Act* states:

16 This chapter requires electric utilities to unbundle their rates and services
17 and to provide open access over their transmission and distribution systems
18 to allow competitive suppliers to generate and sell electricity directly to
19 consumers in this Commonwealth. **The generation of electricity will no**
20 **longer be regulated as a public utility function except as otherwise**
21 **provided for in this chapter.** Electric generation suppliers will be required
22 to obtain licenses, demonstrate financial responsibility and comply with
23 such other requirements concerning service as the commission deems
24 necessary for the protection of the public.⁵

⁵ 66 Pa. C.S. ss 2802(14) (emphasis added).

1 The absence of the Commission's authority to use the default service rate as a cap on EGS
2 prices has been affirmed by the Commonwealth Court.⁶ Because of the longstanding
3 principle that the Commission should not use the default service rate as a cap on EGS
4 prices, the Commission should reject Mr. Geller's recommendations that are based on his
5 contrary view, namely that prices in excess of the default service rates are "overcharging"
6 or not "just and reasonable." This includes Mr. Geller's recommendation that Duquesne's
7 SOP be amended to require that customers be returned to default service at the end of their
8 initial term unless they affirmatively choose to remain with the EGS that provided them
9 service under the SOP. This recommendation was not even based on actual evidence of
10 EGS prices versus default service rates, only Mr. Geller's assertion that the experience of
11 customers in the Duquesne SOP is likely similar to those in the PPL SOP.⁷

12 As I have noted in previous testimony, the continued dominance of default service
13 in the residential market and the apparent disconnect between competitive prices and
14 default service rates is evidence of serious dysfunction in the Pennsylvania retail electricity
15 market. But that dysfunction is in the nature and pricing of default service, not the
16 collective behavior of competitive retailers. Due to the constraints imposed on it by statute
17 and the scope of this proceeding, EGSs do not expect that the Commission will address the
18 distortional effects of default service in this case. However, we do respectfully request that
19 the Commission reject efforts to make those negative effects even worse by establishing,
20 against its own precedent and statutory authority, the default service rate as an explicit or
21 implicit measure of the reasonableness of EGS prices.

⁶ *Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania v. Pennsylvania Public Utility Commission*, 120 A.3d 1087 (Comwlth. Ct. 2015).

⁷ CAUSE-PA Statement No. 1 at p. 29.

1 **Q. Do you have any further response to Mr. Geller's observations regarding the**
2 **competitive market in Pennsylvania?**

3 A. Yes. As noted above, I recognize that Mr. Geller's recommendations are not based solely
4 on an inapt comparison between EGS prices and default service rates. He also makes the
5 following statement: "More data and analysis is necessary to conduct a complete review;
6 however, this preliminary data – coupled with information from other states and the data
7 discussed above regarding excessive pricing for residential shopping customers – indicates
8 to me that there may be racial equity issues in the competitive electric market that require
9 additional attention."⁸ As with some of Mr. Geller's other points, this takes things far afield
10 from the topic of this docket – which remains review of Duquesne's DSP rather than a
11 broad examination of the competitive market – but I would like to provide some response
12 to this discussion. I am very familiar with several of the reports Mr. Geller cites in this
13 part of his testimony, especially the one from the Massachusetts Attorney General's office.⁹
14 The report went beyond just the comparison of prices charged by competitive entities to
15 default service rates and, as Mr. Geller notes, looked at zip code level data as well as data
16 specific to low-income customers. (In Massachusetts, low-income customers are placed
17 on a separate rate code, which makes tracking data related to that customer group easier to
18 separate from the broader set of residential customers.) While this information was very
19 interesting, the report did not offer any clear picture of what may be going on either with
20 low-income shopping in Massachusetts or the sales and marketing practices of competitive
21 retailers serving that customer group. As such, the report should not be seen as supporting

⁸ CAUSE-PA Statement No. 1 at p. 17.

⁹ Id.

1 or refuting any particular hypotheses about what may be going on in the Pennsylvania retail
2 market.¹⁰ The EGS coalition takes no position at this time on the suggestion that the
3 Commission look further into the experience of low-income customers in the competitive
4 retail market, other than to say that any such examination is well beyond the scope of this
5 case.

6
7 **Q. Do you have any further response to the recommendations in Ms. Alexander's**
8 **testimony?**

9 A. Only one, and that is her suggestion that the Commission investigate the prices paid by
10 SOP customers who remain with their EGS after the end of the initial term of their SOP
11 agreement.¹¹ As discussed above, the comparison of prices charged by EGSs with default
12 service rates is inappropriate and could not form the basis for substantive action by the
13 Commission without exceeding the Commission's authority to regulate EGS prices. The
14 EGS Coalition would not oppose an appropriately designed and implemented survey of
15 SOP customers to gather information about their experience with the program. An
16 examination of prices charged by EGSs should not be part of that effort.

17
18

¹⁰ I also take issue with Mr. Geller's characterization of the information he has examined as indicating "racial disparities" or "racial equity issues" in the competitive market in Pennsylvania. This assertion too easily elides the tenuous and preliminary statistical evidence Mr. Geller presents that is specific to Pennsylvania and which is based solely on a customer's status as low-income with the possible racial characteristics of those customers about which Mr. Geller presents no evidence at all.

¹¹ OCA Statement No. 1 at pp. 16-17.

1 **Q. What is your response to the testimony of Ms. Harris on behalf of NRDC regarding**
2 **Duquesne's EV-TOU proposal?**

3 A. Ms. Harris presents a great deal of very helpful information regarding the possible benefits
4 of EV deployment and the role an appropriately designed TOU rate could have in
5 maximizing those benefits. I don't disagree with Ms. Harris on any of these points. What
6 I am troubled by in Ms. Harris's testimony is the absence of any reference at all to the
7 existence of a competitive electricity market in Pennsylvania. If anything, Ms. Harris
8 appears to envision Duquesne's EV-TOU rate as part of a return to the old days of
9 monopoly utility integrated resource planning, in which all customers are utility customers
10 and the only options available in the market are those provided by the monopoly utility.
11 This view finds its expression in Ms. Harris's recommendation that the EV-TOU rate be
12 made "a standard part of the Company's Default Service Plan."¹²

13 I see three problems with this view. The first is that it is unclear that an EV-TOU
14 rate could become a standard feature of Duquesne's DSP without violating the
15 Commission's regulations limiting default service to a single product. As noted in my
16 testimony in the PPL DSP, regarding PPL's proposed renewable product, the
17 Commission's regulations state:

18 Except for rates available consistent with § 54.190 (relating to universal
19 interest applicable to over collections and under collections resulting from
20 reconciliation of automatic adjustment clauses costs and revenues related to
21 electric default service), a default service customer shall be offered a single
22 rate option, which shall be identified as the PTC and displayed as a separate
23 line item on a customer's monthly bill. 52 Pa. Code § 54.187(c).
24

¹² NRDC Statement No. 1 at p. 7.

1 I do not believe Ms. Harris has taken this limitation into account in recommending that the
2 EV-TOU be made a standard feature of Duquesne's DSP.

3 The second problem I see in Ms. Harris's recommendation is that the incorporation
4 of an EV-TOU rate into the Duquesne DSP seems likely to result in advantages to default
5 service that would not accrue to EGS service, thus adding to the structural advantages
6 default service already enjoys *vis a vis* EGS service. Of course, on this point Ms. Harris is
7 only repeating the position put forward by Duquesne itself, which sees the incorporation
8 of EV-TOU customers into its default service customer base as a way to lower supplier
9 bids to provide wholesale power for default service.¹³ I agree with Ms. Harris's view that
10 the broad-based incorporation of EVs on TOU rates into the grid in Duquesne's service
11 territory could lower prices for all customers. I disagree that the route to that result should
12 go through an additional default service product offered by the utility.

13 That brings me to my final point. There is nothing about the positive picture Ms.
14 Harris paints of the benefits of EVs and their incorporation into the grid that could not be
15 achieved through the competitive market. The growing number of EVs on the road in
16 Duquesne's service territory and throughout Pennsylvania represents an extraordinary
17 opportunity for EGSs and other players in the electricity value chain. There is no reason
18 those players will not take advantage of that opportunity unless, of course, it comes to be
19 seen as yet another segment of the market that will be distorted by the overweening
20 presence of the monopoly wires company. If there are barriers to the provision of these
21 services by competitive entities (e.g., in the form of difficulty with the kind of data
22 exchange that would be required for EV optimization), the Commission should address

¹³ *Id.* at p. 19.

1 those barriers. The EGS Coalition urges the Commission not to rely on the utility as the
2 provider of first resort for yet another service that can and should be the province of the
3 competitive market.

4
5 **Q. What is your response to the testimony of MAREC witness Elizabeth Stanton**
6 **regarding Duquesne's proposal for a long-term contract with a solar developer?**

7 A. I don't disagree with much of her testimony. For example, she states that "Duquesne Light
8 does not appear to provide support for its claim that 7 MW of solar is sufficient to result in
9 a prudent mix of resources. If any analysis was conducted along these lines, the Company
10 did not provide it in its Petition," and "Duquesne Light does not discuss an analysis to
11 determine a prudent mix of contracts in its Petition."¹⁴ Her testimony is consistent with the
12 view that Duquesne's proposal is mere tokenism rather than a sincere effort to address a
13 proven need. I also generally agree with her demonstration of the potential benefits of
14 incorporating renewables into the grid on a potentially large scale.

15 As is the case with Ms. Harris's views of the potential benefits of EVs, I disagree
16 with Ms. Stanton's desire to rely so heavily on long-term contracts with regulated utilities
17 to achieve the benefits of grid-scale renewables. Other states are in the process of achieving
18 material levels of renewable development without reliance of utilities as the off-taker of
19 first resort. For example, toward the end of 2019, New York announced that it had reached
20 the milestone of 2 gigawatts of installed solar capacity, relying on a combination of
21 incentives and a public-private partnership that resulted in the infusion of \$4 billion of

¹⁴ MAREC Statement No. 1 at p. 8.

1 private investment in the solar industry in New York.¹⁵ New York also has nearly a
2 gigawatt of community solar in the queue for development, again relying on incentives and
3 private investment rather than token long-term contracts with regulated utilities.¹⁶

4 While it may be true that a long-term contract with a regulated utility can help a
5 developer get financing, that fact is somewhat beside the point; the same would be true for
6 a long-term contract with a regulated entity for any product or service. The better question
7 is whether there is any demonstrated need for proposed long-term contract, either as part
8 of Duquesne's "prudent mix" of resource for purposes of its DSP or as a necessary addition
9 to the total amount of renewable capacity in Pennsylvania. I don't believe Duquesne's
10 filing makes the case on either front.

11 Moreover, as discussed in my initial testimony, there is some evidence that, to the
12 extent there is a dearth of investment in renewables at grid scale, the continued dominant
13 presence of utility default service is a cause of rather than a solution to that condition.¹⁷ I
14 won't repeat that argument here, but Ms. Stanton's testimony contains no evidence that
15 would convince me otherwise. As noted above, I do agree with her view that Duquesne's
16 filing does not contain a sufficient justification for the proposed long-term renewable
17 contract under the standard applicable to the Commission's review of DSP filings.

18
19 **Q. Does this conclude your testimony?**

20 **A.** Yes, it does.

¹⁵ See NYSERDA NY Sun 2 Gigawatt Announcement

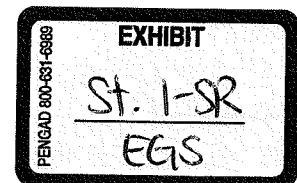
¹⁶ See NYSERDA NY Sun Value Stack

¹⁷ EGS Parties Statement No. 1 at 6.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :
for Approval of a Default Service Plan for the : Docket No. P-2020-3019522
Period June 1, 2021, through May 31, 2025 :

**SUREBUTTAL TESTIMONY
OF CHRISTOPHER H. KALLAHER
ON BEHALF OF INTERSTATE GAS SUPPLY, INC.,
SHIPLEY CHOICE LLC, NRG ENERGY, INC., VISTRA ENERGY CORP.,
ENGIE RESOURCES LLC, WGL ENERGY SERVICES, INC.,
AND DIRECT ENERGY SERVICES, LLC**



EGS Parties' Statement No. 1-SR
August 28, 2020

1 Q. Please state your name.

2 A. Christopher H. Kallaher

3

4 Q. Are you the same Christopher Kallaher who provided Direct Testimony and Rebuttal
5 Testimony in this proceeding?

6 A. Yes.

7

8 Q. What is the purpose of your surrebuttal?

9 A. I am responding to the rebuttal testimony of Duquesne Witnesses Scott Fisher (with respect
10 to the Coalition's proposal regarding new and moving customers), C. James Davis (with
11 respect to the Company's proposed long-term solar PPA), and John Peoples (with respect
12 to the status of the Company's default service plan under FERC's MOPR Order); and
13 CAUSE-PA Witness Harry Geller (with respect to the overall state of the competitive
14 market in Duquesne's service territory and the Coalition's proposal for new and moving
15 customers). The absence of comments on the rebuttal testimony of other witnesses or on
16 other topics does not indicate my agreement with the positions of other parties on those
17 topics but rather is based on my view that those topics have been adequately addressed in
18 the first two rounds of party testimony. I will attempt to organize my testimony by topic
19 rather than by witness, though there may be some occasional overlap, most particularly
20 with respect to the issues of the FERC MOPR and the Company's proposed long-term solar
21 PPA.

22

23

1 I. **COALITION PROPOSAL FOR NEW AND MOVING CUSTOMERS**

2 Q. **How would you characterize the reactions of the rebutting witnesses to the proposal**
3 **that the Commission eliminate the option for new and moving customers to be placed**
4 **on default service upon initiating service with Duquesne?**

5 A. Strongly negative, as I expected those reactions would be. As I described in my initial and
6 rebuttal testimony, default service – a construct that is almost completely unknown outside
7 of the regulated retail electricity and natural gas markets – has become so embedded in the
8 Pennsylvania market that proposals that would weaken its grip on the mass market tend to
9 be met with hostility, by utilities and consumer advocates alike.

10

11 Q. **Did any of the witnesses raise fair points for consideration regarding the Coalition's**
12 **proposal?**

13 A. Yes, they did. Mr. Fisher, in particular, raised some valid questions about the proposal and
14 pointed out some inaccuracies in my testimony that made me realize that I could have
15 presented the proposal more sharply. These points include:

16 • Mr. Fisher is absolutely correct that I should have been crisper in my delineation
17 between the Coalition's proposal for new and moving customers and that proposal's
18 interaction with the Company's SOP. My intention – which Mr. Fisher seems to have
19 divined from my less-than-perfect presentation – was to express the view that new and
20 moving customers would no longer be offered the opportunity to participate in the SOP,
21 as a new mechanism would be created that would allow for all such customers to begin
22 service with an EGS rather than having the option to begin service on default service.

1 The SOP would continue to be offered to the other categories of customers, as described
2 in the Company's default service filing. The SOP is, indeed, a standardized product,
3 and placing new and moving customers who don't otherwise choose on such a
4 standardized product would, in my view, be a missed opportunity for increasing
5 innovation, customer value, and the overall robustness of the market.

- 6 • Mr. Fisher is also correct that my proposal lacks details. Mr. Geller made this point as
7 well. The lack of detail was intentional. The transition to the Coalition's proposed
8 treatment of new and moving customers is the kind of change in the market that could
9 only be accomplished with considerable input from a broad range of stakeholders.
10 There are many possible approaches to presenting this group of customers with their
11 various options for service and I would not presume to know the best one.

- 12 • Mr. Fisher also makes the valid point that I should have distinguished the options
13 Duquesne currently presents to new and moving customers from the options presented
14 by other utilities, including those in other states. The "seamless moves" and "instant
15 connect" functionalities are marked improvements over the paradigm in which
16 customers – including those who were being served by a competitive supplier at their
17 previous address in the same utility service territory – have no choice but to be placed
18 on default service at service initiation. That being said, I do not know the extent to
19 which these features have reduced the percentage of new and moving customers who
20 are placed on default service, these options notwithstanding.

21

22

1 **Q. Are there other points raised by Mr. Fisher and Mr. Geller with respect to the**
2 **Coalition's new and moving customer proposal that you do not agree with?**

3 A. Yes. Both Mr. Fisher and Mr. Geller argue that the proposal would be unfair to customers
4 or would have "the potential for significant customer harm"¹ because of historical
5 differences between prices paid by customers on competitive supply and what those
6 customers would have paid had they been on default service during the same period. As
7 discussed at length in my previous testimony, using default service rates as the yardstick
8 against which the fairness of competitive prices is compared is inappropriate and elevates
9 default service to a position it was never meant to hold in the market, namely a price ceiling
10 above which prices are deemed to be "unfair." The fact that two witnesses with such
11 extensive experience in the industry argue fairly explicitly that requiring that a new or
12 moving customer begin service with an EGS would be unfair because that customer might
13 pay more than he or she would on default service illustrates the point the Coalition has
14 been making in this and every other default service proceeding: the mass market for
15 electricity is held captive by default service, and we are encouraging the Commission to
16 use options that are within its discretion to reduce the hegemony of default service,
17 especially in the residential market. The Coalition's new and moving customer proposal
18 is one such measure.²

¹ DLC Statement No. 3R at p. 4.

² Mr. Fisher argues that the Coalition's proposal might, in fact, exceed the Commission's authority, citing 66 Pa. C.S. § 2807(e)(3.1). DLC Statement No. 3R at p. 34. I do not agree that this statutory language prohibits the Commission from implementing the kind of program the Coalition is recommending, and I am confident that it does not compel the Commission to continue with the current approach. In my view, the statute's silence with respect to the procedures for enrolling new and moving customers affords the Commission broad discretion to

1 Moreover, if it were appropriate for the Commission to be guided in its consideration of
2 our proposal by historical price comparisons between EGS prices and default service rates,
3 a more detailed analysis of those comparisons would be required. The gross comparison
4 of total amounts charged by all EGSs to all their customers during a period of time to the
5 total amount those customers would have paid on default service during the same period
6 would be a poor predictor of what customers participating in a Commission-approved
7 program for new and moving customers would experience. As noted above, the details of
8 such a program, including features that would address concerns about the experiences of
9 some subgroups of customers in the competitive market, would be best provided by a group
10 of stakeholders working collaboratively.

11 I also do not agree with Mr. Geller's concern that the Coalition's proposal would "strip
12 consumers of their statutory right in Pennsylvania to remain with their default service
13 provider if they so choose," or his concern that the proposal that "[r]equiring Duquesne to
14 funnel all new and moving customers through AllConnect during the initial enrollment call
15 may help certain suppliers to corner the market by securing contracts with AllConnect to
16 market their products." Under any conceivable version of the Coalition's proposal,
17 customers would always be allowed to return to default service from the EGS that was
18 serving them following the customer's service initiation. As noted in the footnote above,
19 I do not agree with the view implied by Mr. Geller's comment that there is a statutory
20 obligation to have any group of customers placed on default service at the point of service
21 initiation. Similarly, should the Coalition's proposal be adopted, and should AllConnect

implement a program that would be broad interests of customers and the market generally. I agree with Mr. Fisher that this is mostly a legal issue that is best addressed in briefs.

1 be chosen as the vendor to implement the program (which is far from a given), it is hard to
2 imagine a scenario in which it would be permissible for a group of suppliers to “corner the
3 market” by circumventing what would surely be a Commission-supervised program by
4 contracting directly with AllConnect to gain some advantage in the market. Mr. Geller’s
5 use of the term “corner the market” is also ironic in this context, given that for one subgroup
6 of new and moving customers (those who do not make use of instant connect, seamless
7 move, or SOP options), utility default service has completely cornered the market.

8 I also do not agree with Mr. Geller’s assertion that the antitrust issue I raised in my direct
9 testimony “is an unsupported legal assertion that is outside the Commission’s jurisdiction
10 to address, and should be ignored.”³ If the Coalition believed that the Company’s treatment
11 of new and moving customers was an unlawful tying arrangement, we would look to the
12 Federal courts, not the Commission, for a remedy. The fact that the Company’s treatment
13 of new and moving customers is almost certainly not a *per se* violation of the Sherman Act
14 (saved, at least in part, by the “instant connect” and “seamless moves” features pointed out
15 by Mr. Fisher and the availability of the SOP to this group of customers) is what leads me
16 to raise the issue, on purely policy grounds, of the remaining group of customers, namely
17 those who come away from their service initiation experience with the utility on “bundled”
18 utility service which is, by its nature and as the name implies, the tying of the utility’s
19 monopoly service to the utility’s non-monopoly commodity service. As noted, the fact that
20 the tying of the two products is not mandatory has important legal consequences, but it
21 does not completely mitigate the concern that the Commission and other stakeholders
22 should have about the tying of these two products. I make this observation based on the

³ CAUSE-PA Statement 1R, at p. 9.

1 simple fact that the utility has a 69 percent share of the market for the supposedly
2 competitive product that is tied to the utility's monopoly service for this subgroup of new
3 and moving customers. Based on that state of affairs alone, I believe the Commission
4 would be well-justified in forbidding the tying of utility commodity to utility delivery
5 service for new and moving customers. I concede that this is a policy-based argument. As
6 noted above, I do not believe the statutory framework within which default service compels
7 any particular treatment of new and moving customers. The commission has broad
8 discretion in this area, and the Coalition sees its new and moving customer proposal as a
9 reasonable, even conservative, action to take in response to the continued dominance of the
10 residential market by default service.

11 Finally, I do not agree with the view that "forcing" new and moving customers to choose
12 a competitive supplier is somehow unfair, for any of the reasons cited by Mr. Fisher or Mr.
13 Geller. This view is the apotheosis of the idea that electricity is a service so uniquely
14 complex and yet essential that customers simply cannot be trusted to make decisions about
15 it without a government-regulated "default" option standing by to keep them from making
16 a mistake. Yet people make decisions about products and services that are, if anything, far
17 more complex than electricity all the time, including when they move to a new home or
18 open a new small business. In my house, we have one electricity plan but no fewer than
19 10 electronic devices (I'm reluctant to get an exact count), each of which is far more
20 complex than the technology available to NASA when it put Neil Armstrong and Buzz
21 Aldrin on the moon. These devices are connected to the Internet (itself a system of
22 staggering complexity) by means of service plans that make utility tariffs look like models
23 of simplicity. Nobody thinks twice about it. There is no regulated "default" smart phone

1 or service plan that people are given to relieve them of the burden of having to choose one
2 for themselves, just as there is no "default" automobile (again, machines of extraordinary
3 complexity plus a high degree of potential danger to oneself and others) that is delivered
4 to one's driveway by a regulated manufacturer, followed a month later by the bill.

5 The essential nature of electricity to modern life is also no reason to believe that requiring
6 people to make a choice is an unthinkable burden. Here in the Northeast, a material number
7 of people heat their homes with oil or propane. People moving into a new home that is
8 heated by oil must choose a supplier; there is no regulated provider that delivers it if you
9 do nothing. Choosing an oil supplier becomes just another thing one has to do when
10 moving, like sending a change of address form to the Postal Service or choosing a new
11 grocery store. There is no reason to believe choosing an electric supplier would be any
12 different. Even the basic options for electricity are the same as for home heating oil: fixed
13 or variable.

14 The validity of the Coalition's point, that shopping for electricity at the point of service
15 initiation is not an unreasonable demand to place on customers, is borne out by the fact that
16 in some jurisdictions this is the norm. For example, in Texas, the United Kingdom, and
17 Ireland, all customers are served by a competitive retailer and service initiation is done
18 through the retailer, not the regulated network utility. New and moving customers in these
19 markets know that they must contact a retailer to make sure they have electricity, and there
20 is no option to "default" to bundled service from the utility, as such bundled service does
21 not exist. While every market design has its critics, the need for new and moving customers
22 to choose a supplier is not, to my knowledge, a controversial feature of these markets.
23 Based on my interactions with people from each of these places (an unscientific sample, I

1 concede), I don't believe that Pennsylvanians are any less sophisticated or intelligent than
2 Texans, Brits, or the Irish. I see no reason that Pennsylvanians moving into a new home
3 or starting a new small business are not just as capable as others to choose an electricity
4 supply plan that meets their needs rather than continuing to assume that default service is
5 the only reasonable option for a substantial subgroup of these customers.

6
7 **Q Do you have any further comments on the points raised by Mr. Fisher and Mr. Geller**
8 **in response to your testimony on the overall state of the competitive market in the**
9 **Duquesne service territory?**

10 A. Yes. Mr. Geller asserts that I have made "recommendations to *inflate the cost of default*
11 *service* by shifting additional costs onto default service customers," and that such
12 recommendations should be rejected.⁴ I made no such recommendations. I recommend
13 that the full costs to provide default service should be included in the default service rate.
14 This is hardly a radical proposal. If Mr. Geller believes that the full costs to provide default
15 service should not be included in the default service rate, then he is conceding that default
16 service should be subsidized by the utility's delivery customers, a group that includes EGS
17 customers, which would be just the kind of structural unfairness that the Coalition opposes.
18 I also should have stated more clearly that any retail costs shifted to the default service rate
19 would, in turn, be removed from the revenue requirements for the Company's delivery
20 rates; I am not in favor of adding to default service rates costs that the utility does not
21 actually incur, such as proxies for sales and marketing or other customer acquisition costs.

⁴ CAUSE-PA Statement IR, at p. 5 (italics in original).

1 I also do not favor accurate pricing for default service merely because I believe it would
2 "drive more people into the market," as Mr. Geller puts it.⁵ Increasing default service rates
3 would, other things being equal, tend to cause more customers to switch from default
4 service to competitive supply. But I see this as a secondary effect of accurate pricing, not
5 a primary goal. The primary goals of accurate default service pricing, in my view are (1)
6 sending accurate price signals to retail customers, which all stakeholders should favor, and
7 (2) reducing or eliminating the difference between the total costs paid by EGS customers
8 versus what they would have paid had they remained on default service, which is the very
9 thing that both Mr. Geller and Mr. Fisher argue makes the Coalition's new and moving
10 customer proposal unacceptable. That difference is the number one factor cited by the
11 witnesses appearing for CAUSE-PA and the OCA in this latest round of default service
12 cases as the main reason that the Commission should reject many of the EGS Coalition's
13 proposals for changes to the market. More accurate default service pricing would greatly
14 reduce or possibly eliminate this difference, resulting in a more level rhetorical playing
15 field, if not a completely level one from a competitive perspective.

16 Mr. Fisher's rebuttal testimony on this issue is more on point, and he appropriately notes
17 that Duquesne has gone through several rounds of rate unbundling, which has shifted some
18 costs from delivery rates to default service rates. This is certainly an improvement that I
19 should have acknowledged, though I imagine Mr. Fisher and I would have different views
20 on which facilities and services provided by the delivery side of the business should be
21 allocated to default service and the transfer pricing of those facilities and services. That
22 would be an illuminating discussion, but the subject is well beyond the scope of this

⁵ Id.

1 proceeding. Similarly, as Mr. Fisher notes, there is very likely a premium included by
2 suppliers of FPFR default service products to reflect the obligation to take on all customers,
3 if that proved to be necessary, but I made no attempt to estimate what the amount of that
4 premium might be, and FPFR suppliers are likely relieved that Mr. Fisher did not include
5 such an estimate in his testimony.

6 I will end this section by noting that, taking into account the unbundling efforts Mr. Fisher
7 mentioned in his testimony and other measures such as seamless moves and instant connect
8 that the Company has implemented, I do not believe that Duquesne Light Company is
9 hostile to competition. The Company has a statutory duty to provide default service, and
10 they are doing so in a manner that attempts to achieve some balance among the sometimes-
11 competing obligations placed on it in that role by the Legislature and the Commission. The
12 EGS Coalition believes that the balance of those competing interests – as Alfred Kahn put
13 it, “finding the best possible mix of inevitably imperfect regulation and inevitably
14 imperfect competition” – is leaning now in Pennsylvania too far to the side of regulation
15 versus competition, and we ask that the Commission use its considerable discretion to push
16 things back toward the center. The Coalition’s proposal for new and moving customers is
17 a modest measure that would go a long way toward achieving that goal.

18
19 **II. PROPOSED LONG-TERM SOLAR PPA AND FERC MOPR**

20 **Q. What is your response to the testimony of DLC Witnesses Davis and Peoples on these**
21 **topics?**

22 **A.** My first response is that the testimony of these witnesses made me realize that the two
23 issues are related. This occurred to me in reading Mr. Peoples’ testimony, in particular.

1 As a general matter, I believe Mr. Peoples understands the purpose of my testimony on the
2 MOPR and took it in the spirit in which it was intended. The EGS Coalition does not assert
3 that the terms of the MOPR order should be applied to Duquesne's default service auctions
4 because those auctions fail the test for avoiding being treated as a state subsidy (however
5 that test is finally formulated and applied by PJM and FERC). Our position on this issue
6 is that we would strongly prefer that the MOPR not be applied to the Duquesne default
7 service procurements. In furtherance of that position, we believe the Company should lay
8 out the positive case for why its plan would not cause PJM or FERC to invoke the MOPR
9 in response to the plan's approval and implementation. Given the potential consequences
10 of having the MOPR applied to any aspect of the Company's default service plan, it is
11 entirely appropriate that the Commission have the Company's view of its status under the
12 MOPR before taking final action on the proposed plan.

13 Mr. Peoples' testimony with respect to the MOPR shows the risk to the Company and the
14 market of taking this issue too lightly. Mr. Peoples appears to focus only on the Fixed
15 Price, Full Requirements ("FPFR") procurements that form the bulk of the Company's
16 proposed default service portfolio. Yet the Company is clear that its proposed long-term
17 solar Power Purchase Agreement ("PPA") would be included in the portfolio of assets used
18 to serve default service customers and, as I understand their proposal, the PPA would
19 include all the output of the solar facility, including energy, capacity and renewable energy
20 credits. This seems to me to be the kind of state-approved, utility-backed, resource-specific
21 procurement that is at the very heart of the concerns addressed by FERC in the MOPR
22 order. Is it the Company's position that this aspect of its default service plan is saved from
23 being a "state subsidy" by being conducted outside the FPFR auction process? Or perhaps

1 the Company's position is that a resource-specific procurement that might otherwise fall
2 within the ambit of the MOPR rule escapes that treatment by being placed within the
3 default service plan rather than being conducted separately from that plan? Based on what
4 I see in the Company's filing, both with respect to the proposed solar PPA and the factors
5 proposed by PJM in its FERC compliance filing by which a default service plan could
6 avoid the application of the MOPR (upon which OCA Witness Dr. Ogur appears to have
7 based his testimony⁶), it seems prudent to me to have the Company address this issue
8 directly in a supplemental filing so that the Commission has the benefit of a full accounting
9 on this issue before being asked to approve the Company's plan.

10 Finally, although I believe the issues of the effect of the proposed long-term solar PPA on
11 the market for solar development in Pennsylvania was addressed adequately in the first two
12 rounds of testimony, I will note that I am arguing the very thing Mr. Davis claims I cannot
13 plausibly argue, namely "that the Company's solar PPA is somehow impeding solar
14 developments" in Pennsylvania. As discussed in my previous testimony, I see the
15 continued dominance of utility default service as an impediment to renewable development
16 in the long term as it impedes the ability of large retail players to enter into long term
17 renewable PPAs based on current and anticipated customer demand for these products.

18 The Commission is in no position to eliminate that barrier in this proceeding, but it is in a
19 position to prevent the distortion of the solar energy market that would occur by allowing
20 the utility to play in it for reasons other than actual market forces. Competitive entities like
21 the EGS Coalition are usually concerned that utility involvement in markets that are not a

⁶ OCA Statement No. 1, p. 9.

1 natural monopoly (like electric distribution service) will distort those markets in ways that
2 are not necessarily obvious to either the utilities that propose the involvement or the
3 regulatory commissions that approve them. With respect to the development of any kind
4 of generation resources, the Coalition is concerned that the lure of a long-term contract
5 with a regulated entity will cause the regulated entity's share of the market to become a
6 ceiling rather than a floor, as developers hold out for the relative certainty of a utility
7 contract rather than proceed on a purely merchant basis.

8 I am not saying that a 15 MW solar contract with Duquesne will completely impede the
9 development of the grid-scale solar market in Pennsylvania. But I do believe it is important
10 for the Commission to send the signal that it will not directly intervene in the otherwise
11 natural development of the renewable market for reasons no better than the extremely
12 vague ones the Company has cited in this case. This is especially the case with respect to
13 grid-scale solar development in Pennsylvania. There are already indications that the
14 utilities are seeking to insert themselves aggressively into the community solar segment of
15 that market, a segment that, as I noted in my previous testimony, should be a rich
16 opportunity for competitive players, especially given that there is no reason whatsoever to
17 look to the utilities to do what non-utility entities have done in abundance elsewhere.⁷

18 I will conclude on this point where I began, by noting the inter-relationship of the MOPR
19 issue and the proposed long-term solar PPA. This inter-relationship is a microcosm of
20 broader tensions between State and Federal regulation of electricity markets over the past

⁷ See Pennsylvania House Bill No. 1970, which would allow for community solar in Pennsylvania but only through the mechanism of long-term PPAs with utilities, similar to the one proposed by Duquesne in this case.

1 decade or more. That tension consists of the Federal desire to operate robustly competitive
2 wholesale electricity markets pursuant to the Federal Power Act coming into conflict with
3 the desires of State legislatures and utility commission to intervene in those markets for
4 parochial reasons. Competitive markets take time to convert the signals being revealed by
5 those markets into action and, where the market involves capital-intensive projects like
6 power plants, the time frame for action can exceed the patience of state actors who want to
7 see action to address their state-level concerns. This dynamic found its truest expression
8 in the Maryland Public Service Commission case that led to the Supreme Court's
9 invalidation of a proposed long-term utility contract with a new gas-fired power plant,
10 meant to address a perceived looming capacity shortage in the capacity-constrained areas
11 in the Eastern part of the PJM control area.⁸ In the PSC's decision, Chairman Nazarian
12 cited (favorably) the quotation attributed to Branch Rickey that it is better to "trade a
13 player a year too early rather than a year too late."⁹

14 The Supreme Court found that reasoning unconvincing. Maintaining integrity in the
15 wholesale (and retail) electricity market requires vigilance in resisting the drive by
16 individual market participants to convince state actors to intervene in markets that appear,
17 in the moment, to be going against their interests in some way. The Supreme Court
18 understood the need for this vigilance and that the power markets are not baseball. In
19 baseball, the consequence of erring on the side of trading a player early is that in the coming
20 years the player traded remains superior to the player acquired in the trade. But there are
21 many players on each team and many possible trades, and the game goes on. In markets

⁸ *Hughes v. Talen Energy Marketing, LLC*, 36 S. Ct. 1288 (2016).

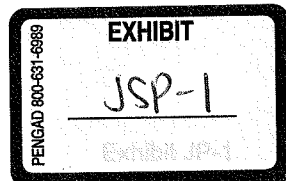
⁹ Maryland Public Service Commission Order No. 84815 (April 12, 2012), at p. 23.

1 such as the relatively nascent one for grid-scale solar, such an early intervention by the
2 State, using the regulated wires company as the vehicle for that intervention, risks far-
3 reaching distortions of the market that might have developed had market forces rather than
4 other interests been allowed to dictate the outcome.

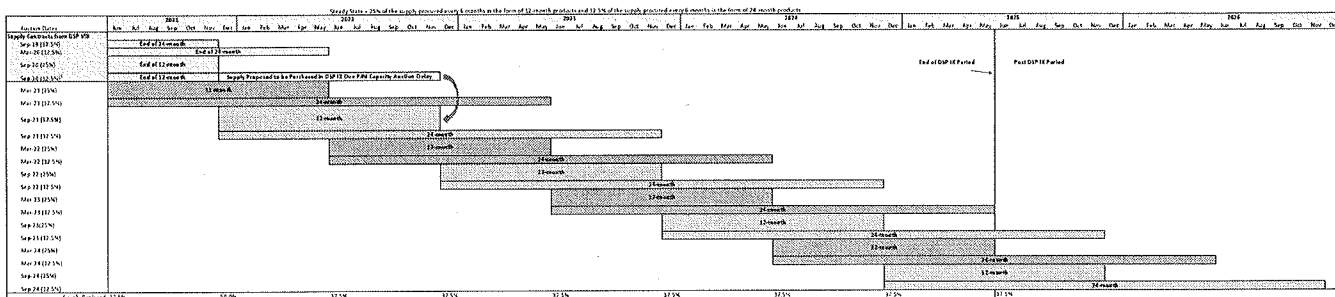
5 In approving the long-term PPAs that were struck down in the *Hughes* case, at least the
6 Maryland Public Service Commission had concerns that were understandable, if not
7 sufficient to justify its actions. As I recall, the disconnect between capacity prices on either
8 side of the constraint in Eastern PJM was considerable, and the need to explain to citizens
9 in one part of a state why their electricity prices are so much higher than citizens a short
10 distance away is the kind of thing that drives State commissions and legislatures to action,
11 however inconsistent that action might be with the Federal Power Act and the Supremacy
12 Clause of the United States Constitution. But what is driving Duquesne's interest in a long-
13 term solar PPA that, in its acquisition of energy and capacity as well as renewable energy
14 credits, would go beyond what has been allowed of it to date? A vague belief that the
15 residents in its service territory like the idea of solar? Nothing the Company or any other
16 party has provided in the way of evidence justifies an intervention in the market that is so
17 fundamentally antithetical to the principles that underlie the proper functioning of the
18 wholesale and retail electricity markets in Pennsylvania. The Coalition urges the
19 Commission, in the strongest possible terms, to reject the Company's proposal to enter into
20 a long-term PPA with a solar developer, as described in its filing.

21
22 **Q. Does this complete your surrebuttal testimony?**

23 **A. Yes, it does.**



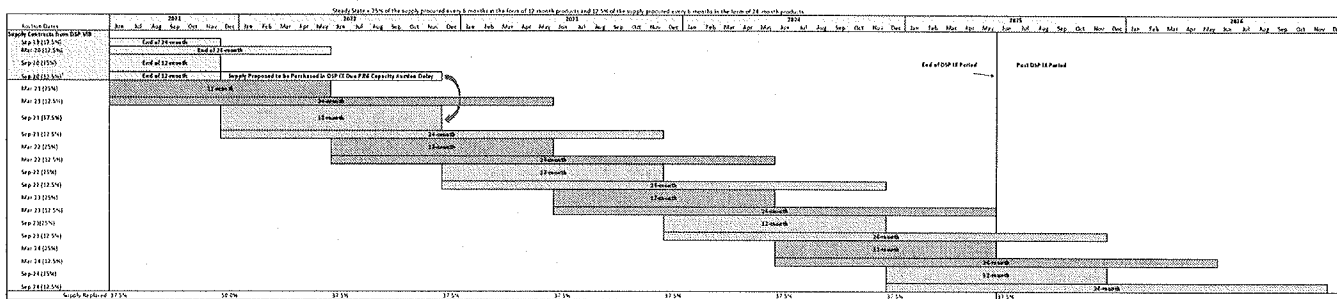
DSP IX Plan for the Residential & Lighting Class



Supply items subject to change. The dates shown are for the DSP IX period. The DSP IX period shall end with the performance period of the DSP IX plan. It is to be noted that the dates shown are for the DSP IX period. Existing contracts entered into with a supplier will be honored.

Exhibit JP-1

DSP IV Plan for the Small C&I Class



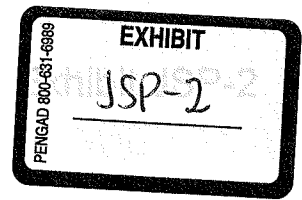
DSP IX Plan for the HPS-Eligible Class

Auction Dates	2011					2012					2013					2014					2015														
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Mar-21 (100%)	12-month																																		
Mar-22 (100%)						12-month																													
Mar-23 (100%)											12-month																								
Mar-24 (100%)																12-month																			

Supply rates adjust hourly.

DSP IX Auction Schedule

Auction Date	Class	Tranches	Amount	Term	Delivery Period
Mar-21	Residential	12	25.0%	12 Months	June 2021 – May 2022
		6	12.5%	24 Months	June 2021 – May 2023
	Small C&I	2	25.0%	12 Months	June 2021 – May 2022
		1	12.5%	24 Months	June 2021 – May 2023
	Medium C&I <200	4	100%	3 Months	June 2021 – August 2021
HPS	2	100%	12 Months	June 2021 – May 2022	
Jun-21	Medium C&I <200	4	100%	3 Months	September 2021 - November 2021
Sep-21	Residential	18	37.5%	12 Months	December 2021 – November 2022
		6	12.5%	24 Months	December 2021 – November 2023
	Small C&I	3	37.5%	12 Months	December 2021 – November 2022
		1	12.5%	24 Months	December 2021 – November 2023
	Medium C&I <200	4	100%	3 Months	December 2021 – February 2022
Dec-21	Medium C&I <200	4	100%	3 Months	March 2022 – May 2022
Mar-22	Residential	12	25.0%	12 Months	June 2022 – May 2023
		6	12.5%	24 Months	June 2022 – May 2024
	Small C&I	2	25.0%	12 Months	June 2022 – May 2023
		1	12.5%	24 Months	June 2022 – May 2024
	Medium C&I <200	4	100%	3 Months	June 2022 – August 2022
HPS	2	100%	12 Months	June 2022 – May 2023	
Jun-22	Medium C&I <200	4	100%	3 Months	September 2022 - November 2022
Sep-22	Residential	12	25.0%	12 Months	December 2022 – November 2023
		6	12.5%	24 Months	December 2022 – November 2024
	Small C&I	2	25.0%	12 Months	December 2022 – November 2023
		1	12.5%	24 Months	December 2022 – November 2024
	Medium C&I <200	4	100%	3 Months	December 2022 – February 2023
Dec-22	Medium C&I <200	4	100%	3 Months	March 2023 - May 2023
Mar-23	Residential	12	25.0%	12 Months	June 2023 – May 2024
		6	12.5%	24 Months	June 2023 – May 2025
	Small C&I	2	25.0%	12 Months	June 2023 – May 2024
		1	12.5%	24 Months	June 2023 – May 2025
	Medium C&I <200	4	100%	3 Months	June 2023 – August 2023
HPS	2	100%	12 Months	June 2023 – May 2024	
Jun-23	Medium C&I <200	4	100%	3 Months	September 2023 - November 2023
Sep-23	Residential	12	25.0%	12 Months	December 2023 – November 2024
		6	12.5%	24 Months	December 2023 – November 2025
	Small C&I	2	25.0%	12 Months	December 2023 – November 2024
		1	12.5%	24 Months	December 2023 – November 2025
	Medium C&I <200	4	100%	3 Months	December 2023 – February 2024
Dec-23	Medium C&I <200	4	100%	3 Months	March 2024 - May 2024
Mar-24	Residential	12	25.0%	12 Months	June 2024 – May 2025
		6	12.5%	24 Months	June 2024 – May 2026
	Small C&I	2	25.0%	12 Months	June 2024 – May 2025
		1	12.5%	24 Months	June 2024 – May 2026
	Medium C&I <200	4	100%	3 Months	June 2024 – August 2024
HPS	2	100%	12 Months	June 2024 – May 2025	
Jun-24	Medium C&I <200	4	100%	3 Months	September 2024 - November 2024
Sep-24	Residential	12	25.0%	12 Months	December 2024 – November 2025
		6	12.5%	24 Months	December 2024 – November 2026
	Small C&I	2	25.0%	12 Months	December 2024 – November 2025
		1	12.5%	24 Months	December 2024 – November 2026
	Medium C&I <200	4	100%	3 Months	December 2024 – February 2025
Dec-24	Medium C&I <200	4	100%	3 Months	March 2025 - May 2025

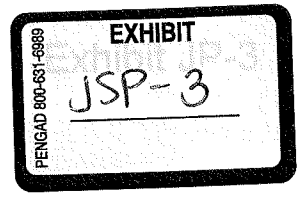


DSP IX Tranches and Supplier Load Caps

Total Number of Tranches Solicited					
Auction Date	Residential	Small C&I	Medium C&I <200 kW	HPS	Total
March 2021	18	3	4	2	27
June 2021			4		4
September 2021	24	4	4		32
December 2021			4		4
March 2022	18	3	4	2	27
June 2022			4		4
September 2022	18	3	4		25
December 2022			4		4
March 2023	18	3	4	2	27
June 2023			4		4
September 2023	18	3	4		25
December 2023			4		4
March 2024	18	3	4	2	27
June 2024			4		4
September 2024	18	3	4		25
December 2024			4		4

Supplier Load Cap (Number of Tranches)					
Auction Date	Residential	Small C&I	Medium C&I <200 kW	HPS	Total
March 2021	9	2	4	2	17
June 2021			4		4
September 2021	12	2	4		18
December 2021			4		4
March 2022	9	2	4	2	17
June 2022			4		4
September 2022	9	2	4		15
December 2022			4		4
March 2023	9	2	4	2	17
June 2023			4		4
September 2023	9	2	4		15
December 2023			4		4
March 2024	9	2	4	2	17
June 2024			4		4
September 2024	9	2	4		15
December 2024			4		4

The supplier load cap to serve Residential and Small C&I customers in a given auction will be maintained equal to 50% of the number of tranches solicited on that auction date, rounded up to the nearest integer number of tranches. The Company will continue the practice of removing the supplier load cap for the Medium C&I <200 kW and HPS solicitations, which are based on short-term market price products.



**PENNSYLVANIA UNIVERSAL
DEFAULT SUPPLIER MASTER AGREEMENT**

**by and between
Duquesne Light Company
and
[INSERT]**

Dated [Month, Day, Year]

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PENNSYLVANIA DEFAULT SERVICE SUPPLIER MASTER AGREEMENT

THIS DEFAULT SERVICE SUPPLIER MASTER AGREEMENT, made and entered into this ____ day of [Month, Day, Year] (the “Agreement”) by and between Duquesne Light Company (the “Company” and “Buyer”), a ~~corporation~~-limited liability company and a public utility organized and existing under the laws of the Commonwealth of Pennsylvania and [INSERT] (“DS Supplier”), the Company and the DS Supplier hereinafter sometimes referred to collectively as the “Parties”, or individually as a “Party”,

WITNESSETH:

WHEREAS, the Company is an electric public utility engaged, inter alia, in providing retail electric service within its service territory located in the Commonwealth of Pennsylvania; and

WHEREAS, the Pennsylvania Public Utility Commission (“PaPUC” or “Commission”) Orders issued pursuant to the Electricity Generation Customer Choice and Competition Act, 66 Pa.C.S. §§ 2801-2812, direct Buyer to supply electric service to Default Service Load within Buyer’s Pennsylvania franchise service territory; and

WHEREAS, the PaPUC has found that, for periods further identified in Appendix C, it would serve the public interest for the Company to secure Default Service Supply (“DS Supply”) through a competitive procurement process (“DS Solicitation”) and the PaPUC has approved such a process; and

WHEREAS, the Company has conducted and completed a successful DS Solicitation for the provision of DS Supply, and the DS Supplier was one of the winning bidders in the DS Solicitation; and

WHEREAS, pursuant to the competitive bidding procedures of the DS Solicitation, the Company and the DS Supplier desire to enter into this Agreement setting forth their respective rights and obligations concerning the provision of DS Supply.

NOW, THEREFORE, in consideration of the mutual covenants and promises set forth below, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto, intending to be legally bound, hereby covenant, promise and agree as follows:

ARTICLE 1: DEFINITIONS

Any capitalized or abbreviated term not elsewhere defined in this Agreement shall have the definition set forth in this Article.

Alternative Energy Credit or "AEC" – Shall have the meaning ascribed thereto in the AEPS Act.

AEPS Act – The Pennsylvania Alternative Energy Portfolio Standards Act, 73 P.S. §§ 1648.1-1648.8.

Affiliate – Means, with respect to any entity, any other entity that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such entity. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

Allocated AECs – Shall mean the types and amounts of AECs specified on Appendix E.

Alternative Energy Portfolio Standards or “AEPS” – Standards requiring that a certain amount of electric energy sold to retail electric customers in the Commonwealth of Pennsylvania be comprised of electricity generated from alternative energy sources, as measured by AECs, in accordance with the requirements of the AEPS Act and provisions of the Electricity Generation Customer Choice and Competition Act, 66 Pa.C.S. §§ 2804, 2812-14, in effect on the Effective Date including, without limitation, any subsequent increases in Tier I requirements under 66 Pa.C.S. § 2814.

Ancillary Services – Shall have the meaning ascribed thereto in the PJM Agreements.

Applicable Legal Authorities – Those federal and Pennsylvania statutes and administrative rules and regulations that govern the electric utility industry in Pennsylvania, as they may be amended from time to time.

Auction Revenue Rights or “ARR” – The current or any successor congestion management mechanisms as may be employed by PJM (whether set forth in the PJM Agreements or elsewhere) for the purpose of allocating financial congestion hedges or financial transmission auction revenue rights. As currently defined by PJM, ARR are entitlements allocated annually by PJM which entitle the holder to receive an allocation of the revenues from the annual auction of financial transmission rights conducted by PJM pursuant to the PJM Agreements.

Bankruptcy Code – Those laws of the United States of America related to bankruptcy, codified and enacted as Title 11 of the United States Code, entitled “Bankruptcy” and found at 11 U.S.C. § 101 et seq., as such laws may be amended, modified, replaced or superseded from time to time.

Billing Month – Each calendar month during the term of this Agreement.

Business Day – Any day on which the Company’s and PJM’s corporate offices are open for business and commercial banks are not authorized or required to close in New York, New York.

Capacity – “Unforced Capacity” as set forth in the PJM Agreements, or any successor, measurement of the capacity obligation of a Load Serving Entity as may be employed in PJM (whether set forth in the PJM Agreements or elsewhere).

Charge – Any fee, charge or other amount that is billable by the Company to the DS Supplier under this Agreement.

Company – Duquesne Light Company.

Costs – With respect to the Non-Defaulting Party, brokerage fees, commissions and other

similar transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations and/or entering into new arrangements which replace this Agreement; and all reasonable attorneys' fees and expenses incurred by the Non-Defaulting Party in connection with the termination of this Agreement.

Customer – Any person or entity who enters into a contractual agreement with the Company to receive retail electric service including, without limitation, all persons or entities taking service under a retail tariff, eligible to receive competitive electricity supply from an EGS or DS, respectively, in accordance with the Applicable Legal Authorities.

Damages – Financial compensation from the Defaulting Party to the Non-Defaulting Party associated with the occurrence of an Event of Default or an Early Termination of this Agreement. This compensation shall be assessed pursuant to Article 5 of this Agreement.

Default Allocation Assessment – Shall have the meaning ascribed to it under the PJM Agreements.

Defaulting Party – A Party to this Agreement that has caused or precipitated an Event of Default or an Early Termination of this Agreement.

Default Service or “DS” – Electric generation service that is provided at retail pursuant to the Applicable Legal Authorities under the Company's retail electric tariffs and under

any other agreements or arrangements between the Company and Customers, to any Customer that is not being served by an EGS.

Default Service Supply or “DS Supply” – All necessary Energy, Capacity, AECs for AEPS Act compliance, Ancillary Services, all transmission and distribution losses and congestion and imbalance costs associated with the provision of such services, and such other services or products that the DS Supplier may be required, by PJM or any governmental body having jurisdiction, to provide in order to meet the DS Supplier Responsibility Share for serving DS Load under this Agreement and as detailed in Appendix C. For the avoidance of doubt, any reference in this Agreement to any other agreement for DS Supply shall include any agreement between the Parties for the provision of Energy—a product or service (e.g., Energy) to serve DS Load, even if such other agreement does not require delivery of additional products or services (e.g., Capacity).

Delivery Period – The delivery period specified in Appendix C.

Delivery Point – Means the applicable zone of the Company as designated by PJM.

DS Customer(s) – Retail customers who are provided Default Service pursuant to the terms of this Agreement, the Applicable Legal Authorities and the Company’s retail tariffs.

DS Fixed Percentage – The percentage of DS Supply, as set forth in Appendix C.

DS Fixed Price – The price in dollars per MWh, as set forth in Appendix C hereto, as determined pursuant to the DS Solicitation.

DS Fixed Price Adder For Hourly Price Service – The fixed price adder for Hourly Price Service in dollars per MWh, as set forth in Appendix C hereto, as determined pursuant to the DS Solicitation.

DS Load – Means the total sales at the retail meter, plus any losses and Unaccounted For Energy (as defined by PJM), as reflected in PJM settlement volumes (including adjustments required by PJM for PJM's derating in conjunction with implementation of marginal losses as appropriate per PJM Agreements), expressed in MWh of retail customers in a particular class of DS Customers being served by Company pursuant to the PUC Orders, as such sales vary from hour to hour, in Company's Pennsylvania franchise service territory, as such territory exists on the Effective Date or may increase or decrease due to de minimis geographic border changes to the service territory that exists on the Effective Date. The DS Load is net of any reduction in load as a result of energy efficiency and demand side response programs offered by Company, PJM, curtailment service providers, or other third parties, or any retail market programs. For avoidance of doubt, DS Load shall not include (i) the amount of load that would otherwise have been served in the absence of such energy efficiency or demand side response programs or retail market programs; or (ii) sales resulting from changes in the Company's Pennsylvania service territory which occur as a result of a merger, consolidation, or acquisition of another entity which has a franchised service territory in

Pennsylvania or a result of a significant franchise territory swap with another entity which has a franchised service territory in Pennsylvania.

DS Solicitation – The competitive bidding processes, procedures and rules employed by the Company to competitively procure DS Supply for purposes of this Agreement.

DS Supplier – An entity that (i) has been selected through the DS Solicitation and has accepted the obligations and associated rights to provide DS Supply to the Company for retail customers in accordance with the Applicable Legal Authorities, (ii) has entered into this Agreement with the Company as a Party, and (iii) is a PJM Member and registered with PJM as a LSE.

DS Supplier Representative – Any officer, director, employee, consultant, contractor, or other agent or representative of the DS Supplier in connection with the DS Supplier's activity under this Agreement. To the extent the DS Supplier is a division or group of a company, the term DS Supplier Representative does not include any person in that company who is not part of the DS Supplier division or group.

DS Supplier Responsibility Share – The fixed percentage share of the Company's DS Load for which the DS Supplier is responsible as set forth in Appendix C.

DS Tariffs – The Company’s existing schedules of rates and services provided to retail customers as currently on file with the Commission and on the Company’s website, as they may be amended from time to time.

DS Variable Payments – The variable supplier payments in dollars based on the Company’s Hourly Price Service formula rate, as set forth in Appendix C hereto, associated with serving the DS Supplier Responsibility Share of the DS Supply.

Early Termination – Termination of this Agreement prior to the end of the term due to the occurrence of an Event of Default as specified in Article 5.2 of this Agreement and the declaration of Early Termination.

Early Termination Date – The date upon which an Early Termination becomes effective as specified in Article 5.2 of this Agreement.

Effective Date – The date designated on the cover page of this Agreement upon which the terms of this Agreement were agreed to by the Parties.

Electric Distribution Company or “EDC” – A public utility providing facilities for the transmission and distribution of electricity to retail customers in Pennsylvania.

Electric Generation Supplier or “EGS” – A person or entity that is duly certified by the Commission to offer and provide competitive electric supply to retail customers located in the Commonwealth of Pennsylvania.

Emergency – (i) an abnormal system condition requiring manual or automatic action to maintain system frequency, or to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property; or (ii) a condition that requires implementation of Emergency Operations Procedures as defined in the PJM Agreements or PJM manuals; or (iii) any other condition or situation that the Company or PJM deems imminently likely to endanger life or property or to affect or impair the Company’s electrical system or the electrical system(s) of other(s) to which the Company’s electrical system is directly or indirectly connected (a “Connected Entity”). Such a condition or situation may include, but shall not be limited to, potential overloading of the Company’s transmission and/or distribution circuits, PJM minimum generation (“light load”) conditions, or unusual operating conditions on either the Company’s or a Connected Entity’s electrical system, or conditions such that the Company is unable to accept Energy from the DS Supplier without jeopardizing the Company’s electrical system or a Connected Entity’s electrical system. Other additional emergencies can only be declared by PJM, FERC, or the PaPUC.

Energy – Three-phase, 60-cycle alternating current electric energy, expressed in units of kilowatt-hours or megawatt-hours.

Event of Default – A Party’s breach of obligations under this Agreement as set forth in Article 5 of this Agreement.

FERC – The Federal Energy Regulatory Commission.

Final Monthly Energy Allocation or “FMEA” – A quantity of Energy which, for any Billing Month, is the PMEA adjusted for any billing or metering data received subsequent to the calculation of PMEA of which PJM is notified within 60 days.

Fixed Price Transaction – A Transaction Confirmation that is not an Hourly Price Transaction.

Force Majeure – Means an event or circumstance which prevents one Party from performing its obligations under one or more transactions, including but not limited to, riots or revolutions, demands or embargoes of the United States Government, fire, flood, drought, insurrection, epidemic, terrorist attack, and acts of God, which are not within the reasonable control of, or the results of the negligence of the affected Party and which, by the exercise of due diligence, the Party is unable to mitigate or avoid or cause to be avoided. Notwithstanding the foregoing, under no circumstance shall an event of Force Majeure be based on: (i) the loss or failure of DS Supplier’s supply; (ii) DS Supplier’s ability to sell the DS Supply at a price greater than that received under any Transaction; (iii) curtailment by a utility transmitting DS Supply; (iv) the Company’s ability to purchase the DS Supply

at a price lower than paid under any Transaction; (v) any change in requirements of any governmental authority; or (vi) labor stoppage or lockout.

Forward Market Price – The price for On-peak Energy Forward Price and Off-peak Energy Forward Price as determined by averaging concurrent broker quotes obtained by the Company for the Market Price Hub as available.

Gains – With respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from an Early Termination of this Agreement, determined in a commercially reasonable manner.

Generator Attribute Tracking System or “GATS” – the system owned and operated by PJM Environmental Services, Inc. to provide reporting and tracking services to its subscribers in support of the AEPS Act, or any successor credit registry selected by the PaPUC. (As specified in Appendix E)

Guaranty – A guaranty, suretyship, hypothecation agreement, margins or security agreement or any other document in the form attached to this DS Supplier Master Agreement or other form approved by the Company.

Guarantor – Any party having the authority and agreeing to guarantee the DS Supplier’s financial obligations under this Agreement, recognizing that such party shall be obligated

to meet the Company's creditworthiness requirements specified in this Agreement for such DS Supplier.

Hourly Price Service – service provided to ~~Large Commercial and Industrial~~ Hourly Price Service (“HPS”)-Eligible Class pursuant to the Company's DS Tariffs, Retail Tariff, Rider No. 9.

Hourly Price Transaction – A Transaction Confirmation for Hourly Price Service, as shown on such confirmation.

Interest Index – The average Federal Funds Effective Rate for the period of time the funds are on deposit. The Federal Funds Effective Rate is published daily on the Federal Reserve website (<http://www.federalreserve.gov/releases/h15/update/>).

Kilowatt or “kW” – Unit of measurement of useful power equivalent to 1000 watts.

Kilowatt-hour or “kWh” – One kilowatt of electric power used over a period of one hour.

~~Large Commercial and Industrial Class~~ ~~Group of Rate Schedules itemized in Appendix C that are eligible for Hourly Price Service DS Supply.~~

Load Serving Entity or “LSE” – An entity that has been granted the authority or has an obligation pursuant to state or local law, regulation or franchise to sell electricity to retail

customers located within the PJM Control Area as that term is defined in the PJM Agreements or in successor, superseding or amended versions of the PJM Agreements that may take effect from time to time over the term of this Agreement. The DS Supplier, for purposes of this Agreement, is not a Load Serving Entity and nothing contained herein shall be deemed to cause the DS Supplier to be a Load Serving Entity.

Losses – With respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from an Early Termination of this Agreement, determined in a commercially reasonable manner.

Margin – The amount by which the Total Exposure Amount exceeds the DS Supplier's, or Guarantor's, credit limit as defined in Section 6.4.

Mark-to-Market (“MtM”) Exposure Amount – Shall have the meaning ascribed to it in Section 6.3 of this Agreement.

Market Price Hub – refers to AEP Dayton Hub, a liquid pricing point located within PJM's geographic footprint, at pnode #34497127.

Maximum Credit Limit – The lesser of the applicable percentage of TNW or the applicable credit limit cap as specified in Section 6.4 of this Agreement.

Medium Commercial and Industrial Class – Group of Rate Schedules that comprise the Medium Commercial and Industrial Class for DS Supply and itemized in Appendix C.

Megawatt or MW – One thousand kilowatts.

Megawatt-hour or MWh – One megawatt of electric power used over a period of one hour.

Merger Event – When a DS Supplier consolidates or amalgamates with, or merges into or with, or transfers all or substantially all of its assets to another entity and either (i) the resulting entity fails to assume all of the obligations of such DS Supplier hereunder in the sole discretion of the Company or (ii) the benefits of any credit support provided pursuant to Article 6 of this Agreement fail to extend to the performance by such resulting, surviving or transferee entity of the DS Supplier's obligations hereunder, and the resulting entity or its guarantor fails to meet the creditworthiness requirements of this Agreement in the sole discretion of the Company.

Minimum Rating – A minimum senior unsecured debt rating as defined in Appendix A of this Agreement.

Minimum Transfer Amount – \$100,000.

NERC – The North American Electric Reliability Corporation or its successor.

Network Integration Transmission Service or “NITS” – “Network Integration Transmission Service” under the PJM Agreements in effect as of the date of this Agreement, or its successor, superseding or amended versions of the PJM Agreements that may take effect from time to time over the term of this Agreement. In the event the PJM Agreements are modified such that “Network Integration Transmission Service” is no longer offered, Network Integration Transmission Service shall mean the type of transmission service offered under the PJM Agreements that is accorded the highest level of priority for scheduling and curtailment purposes.

Non-Defaulting Party – A Party to this Agreement who, at the time an Event of Default occurs, is not itself in default of this Agreement and has not otherwise caused or precipitated an Event of Default or Early Termination of this Agreement.

Off-Peak Energy Forward Price – Means the price for Off-Peak Hours for each billing month of the delivery period stated in terms of \$/MWh as based on the most recent publicly available information and/or quotes from Reference Market Makers on forward energy transactions occurring at the Market Price Hub. In the event that the Market Price Hub is no longer available or no longer representative of a transparent trading hub, the Parties will negotiate in good faith to agree upon an alternate liquid price.

On-Peak Energy Forward Price – Means the price for On-Peak Hours for each billing month of the delivery period stated in terms of \$/MWh as based on the most recent publicly

available information and/or quotes from Reference Market Makers on forward energy transactions occurring at the Market Price Hub. In the event that the Market Price Hub is no longer representative of a transparent trading hub, the Parties will negotiate in good faith to agree upon an alternate liquid price.

PaPUC or Commission – The Pennsylvania Public Utility Commission or its successor.

PJM – PJM Interconnection L.L.C. or its successor.

PJM Agreements – The PJM OATT, PJM RAA, PJM OA and all other PJM agreements, procedures, manuals and documents applicable to the Transactions covered by or relating to this Agreement.

PJM Control Area – That certain Control Area encompassing electric systems in parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia, as may be modified from time to time, and which is recognized by the North American Electric Reliability Council as the "PJM Control Area".

PJM Member – A member in good standing of PJM that satisfies the requirements to conduct business with PJM.

PJM OA – The PJM Operating Agreement or the successor, superseding or amended version of the PJM Operating Agreement that may take effect from time to time.

PJM OATT – The PJM Open Access Transmission Tariff or the successor, superseding or amended version of the PJM Open Access Transmission Tariff that may take effect from time to time.

PJM OI – The PJM Office of Interconnection, the system operator for the PJM Control Area.

PJM RAA – The PJM Reliability Assurance Agreement or the successor, superseding or amended version of the PJM Reliability Assurance Agreement that may take effect from time to time.

PMEA/FMEA Adjustment Amount – For any Billing Month, the monetary amount due to the DS Supplier or the Company, as the case may be, in order to reconcile any difference between the PMEA used for the purpose of calculating estimated payments made to DS Supplier for a given month and the FMEA used for calculating the final payments due to the DS Supplier for such month as more fully described in Article 9 hereof.

Preliminary Monthly Energy Allocation or “PMEA” – A quantity of Energy which, for any Billing Month, is the preliminary calculation of the DS Supplier’s DS Supplier Responsibility Share.

Rate Schedule(s) – Shall mean the specified existing, and modified or successor customer rate schedule(s) in the electric service tariff of the Company filed with the Commission.

Reliability First Corporation or “RFC” – The approved regional NERC entity with responsibility for the Commonwealth of Pennsylvania.

Residential Class – Group of Rate Schedules that comprise the Residential Class for the DS Supply and itemized in Appendix C.

Rounding Amount – \$100,000.

Settlement Amount – With respect to a Non-Defaulting Party, the net amount of the Losses or Gains, and Costs, expressed in U.S. Dollars, which such Party incurs as a result of Early Termination, as set forth in Section 5.4(a) of this Agreement. For the purposes of calculating the Termination Payment, the Settlement Amount shall be considered an amount due to the Non-Defaulting Party under this Agreement if the total of the Losses and Costs exceeds the Gains and shall be considered an amount due to the Defaulting Party under this Agreement if the Gains exceed the total of the Losses and Costs.

Small Commercial and Industrial Class – Group of Rate Schedules that comprise the Small Commercial and Industrial Class for DS Supply and itemized in Appendix C.

Statement – A monthly report prepared by the Company for the DS Supplier indicating the amount due to the DS Supplier by the Company as compensation for DS Supply supplied to DS Customers by the DS Supplier during the current Billing Month, in accordance with DS Supplier’s obligations under this Agreement.

Supply Day – Any calendar day during the term of this Agreement on which the DS Supplier is providing, or is obligated by this Agreement to provide, DS Supply to the Company’s DS Customers.

Tangible Net Worth or “TNW” – Total assets less intangible assets and total liabilities. Intangible assets include benefits such as goodwill, patents, copyrights and trademarks.

Termination Payment – A payment resulting from an Early Termination that is calculated in accordance with Article 5.4.

Tier I AEC – Shall mean an AEC ~~generated by a non-solar photovoltaic energy source~~ that will satisfy the non-solar Tier I requirements of the AEPS Act applicable to the Company. (As specified in Appendix E)

Tier I (Solar) AEC – Shall mean an AEC generated by a solar photovoltaic energy source that will satisfy the Tier I solar photovoltaic requirements of the AEPS Act applicable to the Company. (As specified in Appendix E)

Tier II AEC – Shall mean an AEC generated by a non-solar photovoltaic energy source that will satisfy the non-solar Tier II requirements of the AEPS Act applicable to the Company. (As specified in Appendix E)

Total Exposure Amount – An amount calculated daily for the DS Supplier reflecting the total credit exposure to the Company and consisting of the sum of (i) the Mark-to-Market Exposure Amount arising under this Agreement; (ii) any amount(s) designated as the “Mark-to-Market Exposure Amount” arising under any other DS Supply agreements providing for “DS Supply” or similar default service; and (iii) the amount designated as the “credit exposure” under any other DS Supply agreements providing for DS Supply or similar default service; provided that in the event the amount calculated for any day is a negative number, it shall be deemed to be zero for such day.

Tranche – A fixed percentage share of the Company’s DS Load for the Customer Group as indicated in any given Transaction Confirmation, as specified in Appendix C.

Transaction – Means a particular agreement by which the Company purchases and the DS Supplier sells DS Supply pursuant to this Agreement, the details of which are more fully set forth in Exhibit 1 – Transaction Confirmation.

Transaction Confirmation – Shall have the meaning ascribed to it in Appendix C and Exhibit 1 of this Agreement.

ARTICLE 2: GENERAL TERMS AND CONDITIONS**2.1 Capacity in Which Company Is Entering into this Agreement**

The DS Supplier agrees and acknowledges that the Company is contracting for the provision of DS Supply from such DS Supplier for Customers receiving Default Service on the Company's electric system pursuant to the authorizations provided to the Company. The DS Supplier further agrees and acknowledges that the Company will administer and monitor the DS Supplier's performance in providing DS Supply under this Agreement and that the Company shall be entitled to enforce the DS Supplier's obligations related to the provision of DS Supply. The DS Supplier hereby permanently, expressly and irrevocably waives any claim that Company is not entitled to seek enforcement of this Agreement on behalf of Customers. It is the specific intention of the Parties hereto that Customers and Customer groups are not third party beneficiaries of this Agreement and that no Customer or Customer group shall seek enforcement of this Agreement against the DS Supplier on their own behalf, either independently or by joining in any legal proceeding brought by the Company.

The Parties acknowledge that the Agreement is a forward contract and, accordingly, the Parties hereto are entitled to the protections of Section 556 of the Bankruptcy Code. The Parties therefore agree that the Agreement may be terminated by either Party upon the commencement of a proceeding by the other Party under any chapter of the Bankruptcy Code in accordance with Article 5.2 of this Agreement.

2.2 Parties' Obligations**(a) Obligations of DS Supplier**

The DS Supplier hereby agrees as follows:

- (i) To provide service on a firm and continuous basis such that the supply delivered for the term of the Agreement meets the terms and conditions set forth in Appendix C;
- (ii) To provide sufficient quantities of DS Supply on an instantaneous basis at all times and supplied to the Delivery Point to meet the DS Supplier Responsibility Share;
- (iii) To procure those services provided by the PJM OI and to perform such functions as may be required by the PJM OI that are necessary for the delivery of DS Supply required hereunder;
- (iv) To cooperate with the Company in any regulatory compliance efforts that may be required to maintain the ongoing legitimacy and enforceability of the terms of this Agreement and to fulfill any regulatory reporting requirement associated with the provision of DS Supply, before the PaPUC, FERC or any other regulatory body asserting jurisdiction;
- (v) To pay to the Company the PMEA/FMEA Adjustment Amount for any Billing Month in which the PMEA exceeds the FMEA, as more fully described in Article 9 of this Agreement;
- (vi) To accept assignment of and to fulfill all obligations of a LSE that are assigned to it by this Agreement;
- (vii) To comply in a timely manner with all obligations under this Agreement imposed upon the DS Supplier; and
- (viii) To comply with the AEPS requirements of the Company's Default Service Plan, as detailed in Appendix E.

(b) Obligations of the Company

The Company hereby agrees as follows:

- (i) To pay to each DS Supplier every month an amount due, resulting from the calculations, as detailed in Article 9 of this Agreement, subject to the adjustments as expressed therein;
- (ii) To pay to the DS Supplier the PMEA/FMEA Adjustment Amount for any Billing Month in which the FMEA exceeds the PMEA, as more fully described in Article 9 of this Agreement;
- (iii) To provide to the DS Supplier its estimated aggregate load obligation (capacity MW value) for each Supply Day no less than five (5) calendar days prior to the day of delivery. Further, this information will be posted in the DS Supplier's specific PJM PowerMeter~~MTR~~ account, or successor system or process;
- (iv) To comply in a timely manner with all obligations under this Agreement imposed upon the Company;
- (v) To accept the delivery of DS Supply necessary to meet the DS Load;
- (vi) To be responsible (as between the Company and the DS Supplier) for the provision of the Allocated AECs to satisfy AEPS requirements; and
- (vii) To be the Load Serving Entity for supply purchased under this Agreement.

2.3 Congestion and Congestion Management

The DS Supplier is responsible for any congestion costs incurred to meet the DS Supplier Responsibility Share. The Company shall transfer or assign to the DS Supplier the Company's rights to Auction Revenue Rights (ARRs) to which the Company is entitled

as an LSE pursuant to the PJM Agreements, including the rights to ARRs, provided that such rights are related to the service being provided to meet the DS Supplier Responsibility Share and such rights are for the Delivery Period. All rights, liabilities and obligations associated with such ARRs will accrue and be assumed by the DS Supplier through the transfer or assignment from the Company to the DS Supplier including the responsibility and ability of the DS Supplier to request or nominate such ARRs when applicable and feasible. Should the conditions above not be met, the entity recognized by PJM as having the right to make the nominations will nominate such ARRs for the upcoming PJM planning period and such ARRs will be allocated to the DS Supplier in accordance with the PJM Agreements based upon its DS Supplier Responsibility Share.

2.4 PJM Services

The DS Supplier shall make all necessary arrangements for the delivery of DS Supply through the PJM OI. The Company will advise the PJM OI of the magnitude and location of each DS Supplier's actual DS Supplier Responsibility Share, as required by the PJM OI, for the purpose of calculating such DS Supplier's appropriate DS Supply requirements related to the provision of service under this Agreement by DS Supplier arising under the PJM Agreements. The DS Supplier shall remain responsible to PJM for the performance of its LSE obligations associated with the provision of DS Supply under this Agreement until the effective date of the transfer of such LSE obligations.

The Company shall generate and provide ~~via a Task Letter Attachment~~ in writing to DS Supplier the PJM shortname(s) associated with supplier's unique contract type(s), as necessary. Unique shortname(s) may be generated for each differing contract type. DS Supplier shall complete all required forms and processing to PJM to create shortname(s)

within the PJM system.

For the period of time this Agreement is in effect, both the Company and DS Supplier shall have executed the PJM Declaration of Authority, and shall remain in effect during the Term of this Agreement. In the event PJM requires that the Declaration of Authority be amended after execution by the DS Supplier, DS Supplier agrees to execute a revised Declaration of Authority in accordance with PJM requirements.

2.5 PJM Agreement Modifications

(a) If the PJM Agreements are amended or modified so that any schedule or section reference herein to such agreements is changed, such schedule or section reference herein shall be deemed to automatically (and without any further action by the Parties) refer to the new or successive schedule or section in the PJM Agreements which replaces that originally referred to in this Agreement.

(b) If the applicable provisions of the PJM Agreements referenced herein, or any other PJM rules relating to the implementation of this Agreement, are changed materially from those in effect on the Effective Date, both Parties shall cooperate to make conforming changes to this Agreement to fulfill the purposes of this Agreement, including the DS Supplier's responsibility for changes in PJM products and pricing during the Term. DS Supplier bears the risk and responsibility of all charges resulting from any changes in PJM products and pricing during the term of this Agreement with the exception of (i) future PJM charges related solely to the Company providing network transmission service, and (ii) those charges identified as EDC responsibility in Appendix D, including for transition costs related to the elimination of through-and-out transmission rates.

2.6 PJM Member Default Cost Allocation

In the event PJM imposes a Default Allocation Assessment upon the Company relating to a default during the Term, the Company shall invoice DS Supplier, and DS Supplier shall pay an amount equal to the product of (i) DS Supplier Responsibility Share, and (ii) the Default Allocation Assessment, ~~less the amounts of any types of charges allocated to the Company under this Agreement that are used by PJM in calculating such Default Allocation Assessment.~~

2.7 Other Fines and Penalties

If fees, fines, penalties, or costs are claimed or assessed against the Company by any Applicable Legal Authority or PJM due to noncompliance by the DS Supplier with this Agreement, any other requirements of law, or the PJM Agreements, the DS Supplier shall indemnify and hold the Company harmless against any and all losses, liabilities, damages, and claims suffered or incurred by the Company, including claims for indemnity or contribution made by third parties against the Company, except to the extent the Company recovers any such losses, liabilities or damages through other provisions of this Agreement.

2.8 Communications and Data Exchange

The DS Supplier and the Company shall supply to each other in a thorough and timely manner all data, materials or other information that is specified in this Agreement, or that may otherwise reasonably be required by DS Supplier or by the Company in connection with the provision of DS Supply by the DS Supplier to DS Customers, if required.

The DS Supplier shall be equipped with the communications capabilities necessary

to comply with the communications and data exchange standards that are set by and as may, from time to time, be modified by PJM, and shall exclusively bear the costs of installing, maintaining, testing, and operating all required information technology systems that will enable it to send to and receive data from the Company and PJM and to satisfy its obligations under this Agreement, the PJM Agreements and all other relevant agreements.

2.9 Record Retention

The Company shall retain necessary records for the longer of two years or as required under applicable PaPUC requirements so as to permit DS Supplier to confirm the validity of payments due to DS Supplier hereunder; provided that if a DS Supplier has provided notice pursuant to this Agreement that it disputes the validity of any payments, the Company agrees that it shall retain all records related to such dispute until the dispute is finally resolved.

2.10 Verification

In the event of a good faith dispute regarding any invoice issued or payment due under this Agreement, and provided that a mutually acceptable confidentiality agreement is executed by the Parties, each Party will have the right to verify, at its sole expense, the accuracy of the invoice or the calculation of the payment due by obtaining copies of relevant portions of the books and records of the other Party.

ARTICLE 3: REPRESENTATIONS AND WARRANTIES

3.1 DS Supplier's Representations and Warranties

The DS Supplier hereby represents, warrants and covenants to the Company on the Effective Date and throughout the term of this Agreement as follows:

(a) It is a corporation, partnership, limited liability company or other legal entity, duly organized, validly existing and in good standing under the laws of the Commonwealth of Pennsylvania or, if another jurisdiction, under the laws of such jurisdiction and, in such case, is duly registered and authorized to do business in such other jurisdiction and the Commonwealth of Pennsylvania;

(b) It has all requisite power and authority to execute and deliver this Agreement and to carry on the business to be conducted by it under this Agreement and to enter into and perform its obligations hereunder, including satisfaction of all applicable FERC requirements;

(c) The execution and delivery of this Agreement and the performance of such DS Supplier's obligations hereunder have been duly authorized by all necessary action on the part of the DS Supplier and do not and will not conflict with, or constitute a breach of or default under, any of the terms, conditions, or provisions of the DS Supplier's certificate of incorporation or bylaws or other constituent instruments or any indenture, mortgage, other evidence of indebtedness, or other agreement or instrument or any statute or rule, regulation, order, judgment, or decree of any judicial or administrative body to which the DS Supplier is a party or by which the DS Supplier or any of its properties is bound or subject;

(d) All necessary and appropriate action that is required on the DS Supplier's part to execute this Agreement has been completed;

(e) This Agreement is the legal, valid and binding obligation of the DS Supplier, enforceable in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency or similar laws from time to time in effect

that affect creditors' rights in general or by general principles of equity;

(f) There are no actions at law, suits in equity, proceedings or claims pending or, to the DS Supplier's knowledge, threatened against the DS Supplier before any federal, state, foreign or local court, tribunal or governmental agency or authority that might materially delay, prevent or hinder the DS Supplier's performance of its obligations hereunder;

(g) It has entered into this Agreement with a full understanding of the material terms and risks of the same, and it is capable of assuming those risks;

(h) It is in good standing as an LSE in PJM, is a signatory to all applicable PJM Agreements, and is in compliance with, and will continue to comply with, all obligations, rules and regulations, as established and interpreted by the PJM OI, that are applicable to LSEs as defined by the PJM Agreements; provided that the DS Supplier shall not be obligated to become an LSE in PJM until the date it begins providing DS Supply;

(i) It has made its trading and investment decisions (including regarding the suitability thereof) based upon its own judgment and any advice from such advisors as it has deemed necessary and not in reliance upon any view expressed by the Company;

(j) It will comply with any and all information and data transfer protocols that may be adopted by the Company or that are set by, and from time to time modified by, the PaPUC; provided that DS Supplier shall be entitled to exercise its reserved right to challenge any such protocols in the appropriate forum;

(k) It is not Bankrupt or insolvent and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt or insolvent;

(l) There are no pending or, to its knowledge, threatened, actions, suits or proceedings against it or any of its Affiliates, or any legal proceedings before any Governmental Authority, that could materially adversely affect its ability to perform its obligations under this Agreement;

(m) No Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;

(n) It is not relying upon the advice or recommendations of the other Party in entering into this Agreement, it is capable of understanding, understands and accepts the terms, conditions and risks of this Agreement, and the other Party is not acting as a fiduciary for or advisor to it in respect of this Agreement; and

(o) It has entered into this Agreement in connection with the conduct of its business and it has the capacity or ability to provide or take delivery of DS Supply as required by this Agreement, and it is an "eligible contract participant" as defined in Section 1a(12) of the Commodity Exchange Act.

3.2 Company's Representations and Warranties

The Company hereby represents, warrants and covenants to the DS Supplier as follows:

(a) The Company is an electric utility corporation—duly organized, validly existing and in good standing under the laws of the Commonwealth of Pennsylvania;

(b) The Company has all requisite power and authority to carry on the business to be conducted by it under this Agreement and to enter into and perform its obligations hereunder;

(c) The execution and delivery of this Agreement and the performance of the Company's obligations hereunder have been duly authorized by all necessary action on the part of the Company and do not and will not conflict with, constitute a breach of or default under, any of the terms, conditions, or provisions of the Company's certificate of incorporation or bylaws or any indenture, mortgage, other evidence of indebtedness, or other agreement or instrument or any statute or rule, regulation, order, judgment, or decree of any judicial or administrative body to which the Company is a party or by which the Company or any of its properties is bound or subject;

(d) All necessary and appropriate action that is required on the Company's part to execute this Agreement has been completed;

(e) This Agreement is the legal, valid and binding obligation of the Company, enforceable in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency or similar laws from time to time in effect that affect creditors' rights in general or by general principles of equity and the Commission's power under section 508 of the Public Utility Code, 66 Pa.C.S. § 508, to amend or modify the contracts of public utilities;

(f) The ability of the Company to pay any and all amounts due and payable under this Agreement, or upon any potential breach thereof, is not conditioned upon any governmental or administrative appropriation by the Commission, the Commonwealth of Pennsylvania or any other governmental authority;

(g) There are no actions at law, suits in equity, proceedings or claims pending or, to the Company's knowledge, threatened against the Company before any federal, state, foreign or local court, tribunal or governmental agency or authority that might materially

delay, prevent or hinder the Company's performance of its obligations under this Agreement;

(h) It has entered into this Agreement with a full understanding of the material terms and risks of the same, and it is capable of assuming those risks;

(i) The Company's performance under this Agreement is not contingent upon the performance of Customers or the ability of Customers to pay rates;

(j) The Company shall have sole responsibility for metering and billing with respect to Customers; and

(k) The Company shall be responsible for electric distribution services, and the DS Supplier shall not be responsible for distribution charges.

3.3 Survival of Obligations

All representations and warranties contained in this Article are of a continuing nature and shall be maintained during the term of this Agreement or until all amounts due hereunder, including all obligations, have been paid or performed in full. If a Party learns that any of the representations, warranties or covenants in this Agreement are no longer true during the term of this Agreement, the Party shall immediately notify the other Party via facsimile, with a hard copy of the notice delivered by overnight mail. Company, may, in its sole discretion, treat any such materially incorrect or misleading representation or warranty as an Event of Default hereunder.

ARTICLE 4: COMMENCEMENT AND TERMINATION OF AGREEMENT

4.1 Commencement and Termination

The term of this Agreement shall commence upon the Effective Date. Unless

otherwise agreed upon by the Company and the DS Supplier, this Agreement shall continue in full force and effect from the Effective Date until the end of all Transaction(s) executed under this Agreement, unless the Agreement is terminated prematurely pursuant to the provisions of this Agreement.

4.2 Termination of Right to Supply

The DS Supplier agrees that termination of this Agreement for reason of an Event of Default shall terminate any right of the DS Supplier to provide DS Supply to the DS Customers and nullify any of the entitlements to which the DS Supplier became entitled as a result of being selected as a winning bidder in the DS Solicitation.

4.3 Survival of Obligations

Termination or expiration of this Agreement for any reason shall not relieve the Company or the DS Supplier of any obligation accrued or accruing prior to such termination. Applicable provisions of this Agreement shall continue in effect after termination to the extent necessary to provide for final billings, including, without limitation, Article 4 (Commencement and Termination of Agreement), Article 5 (Breach and Default), Article 11 (Dispute Resolution), Article 13 (Limitation of Remedies, Liability and Damages), Article 14 (Indemnification), and Article 16 (Miscellaneous Provisions).

4.4 Mutual Termination

The Company and the DS Supplier may agree at any time during the term of this Agreement to terminate their respective rights and obligations hereunder on such terms and under such conditions that they mutually deem to be appropriate as set forth in a mutual termination agreement acceptable in form and substance to the Company and the DS

Supplier (“Mutual Termination Agreement”); provided that Company agrees that it shall enter into such a Mutual Termination Agreement, which will discharge the terminating DS Supplier (the “Terminating DS Supplier”) with respect to liabilities arising after the effective date of the Mutual Termination Agreement if the following conditions precedent are met: (i) the Terminating DS Supplier identifies a replacement DS Supplier willing to assume all obligations of the Terminating DS Supplier hereunder for the remaining term of this Agreement (the “Replacement DS Supplier”); (ii) the Replacement DS Supplier demonstrates its compliance with Article 6 of this Agreement, “Creditworthiness,” as of the effective date of the Mutual Termination Agreement, that determination to be made in the sole discretion of Company; (iii) the Replacement DS Supplier executes a counterpart signature page to this Agreement and thereby becomes a Party under this Agreement, effective immediately following the effective date of the Mutual Termination Agreement; and (iv) the Terminating DS Supplier is not, to the belief or knowledge of the Company, subject to an Event of Default as of the effective date of the Mutual Termination Agreement or, if the Company believes that the Terminating DS Supplier may be subject to an Event of Default, either (a) the Company has determined that, as of the effective date of the Mutual Termination Agreement, it has not incurred any Damages as a result of the Event of Default or (b) if the Company has determined, as of the effective date of the Mutual Termination Agreement, that it may have incurred Damages as a result of the Event of Default, that the Replacement DS Supplier has agreed in writing to be responsible for the payment of such Damages or to otherwise cure the Event of Default, in either case to the satisfaction of the Company in its sole discretion.

ARTICLE 5: BREACH AND DEFAULT

5.1 Events of Default

An Event of Default under this Agreement shall occur if a Party (the “Defaulting Party”):

- (i) Is the subject of a voluntary bankruptcy, insolvency or similar proceeding;
- (ii) Makes an assignment for the benefit of its creditors;
- (iii) Applies for, seeks consent to, or acquiesces in the appointment of a receiver, custodian, trustee, liquidator or similar official to manage all or a substantial portion of its assets;
- (iv) Is dissolved (other than pursuant to a consolidation, amalgamation or merger) or is the subject of a Merger Event in the case of the DS Supplier;
- (v) Has a secured party take possession of all or substantially all of its assets or has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all of its assets;
- (vi) Has a resolution passed for its winding-up, official management or liquidation (other than pursuant to a consolidation, amalgamation or merger);
- (vii) In the case of a DS Supplier, PJM terminates the DS Supplier’s ability to make purchases from PJM markets or PJM holds the Company responsible for the provision of DS Supply under this Agreement and PJM does not rescind such termination or assignment of responsibility within seven (7) Business Days;
- (viii) Fails to comply with the creditworthiness requirements as set forth in Article 6 of this Agreement, including, without limitation, compliance with the creditworthiness requirements to cover the Margin calculated under Section 6.5 or post any

Margin due under Section 6.5 of this Agreement, within the time frames set forth in this Agreement;

(ix) Is declared by PJM to be in default of any provision of any PJM Agreement, which default prevents a Party's performance hereunder if such failure is not remedied within three (3) Business Days after written notice;

(x) Fails to make, when due, any payment required pursuant to this Agreement if such failure is not remedied within two (2) Business Days after written notice;

(xi) Violates any federal, state or local code, regulation or statute applicable to the supply of ~~Energy and/or AECs~~ DS Supply (or any constituent thereof such as Energy or AECs) in a manner that materially, and adversely, affects the Party's performance under this Agreement, including by way of failure to continually satisfy all applicable FERC requirements, or, in the case of the DS Supplier, by way of failure to maintain any other governmental approvals required for participation in the Pennsylvania retail Energy market, or defaults on any obligation or other failure to comply with PJM requirements under the PJM Agreements;

(xii) Is the subject of an involuntary bankruptcy or similar proceeding;

(xiii) Subject to Section 5.3(b) of this Agreement, in the case of the Company, fails to accept DS Supply properly tendered by the DS Supplier under this Agreement;

(xiv) Fails to perform any material covenant or obligation set forth in this Agreement, if such failure is not remedied within three (3) Business Days after written notice;

(xv) Makes a materially incorrect or misleading representation or warranty under this Agreement or under any response to the DS Solicitation; or

(xvi) Commits an act or makes an omission that constitutes an “Event of Default” under any other agreement(s) for the provision of DS Supply between the Company and the DS Supplier; and fails to remedy such condition, event or delinquency herein above described such that the other Party (the “Non-Defaulting Party”) is completely made whole with respect to such condition, event or delinquency, within three (3) Business Days of receipt of written notice thereof from such Non-Defaulting Party; provided, however, that an Event of Default shall be deemed to have occurred immediately, without any need for the provision of notice thereof by the Non-Defaulting Party and without any right of cure on the part of the Defaulting Party, in the event of the occurrence of a condition, event or delinquency described in subsections (i), (ii), (iii), (iv), (v), (vi), (vii) or (viii) above. Termination or modification of this Agreement by the PaPUC, other regulatory authority or court of law does not constitute an Event of Default under this Agreement.

(xvii) With respect to the DS Supplier’s Guarantor, if any:

1. Representation or warranty made by the Guarantor in connection with this Agreement is false or misleading in any material respect when made or when deemed made or repeated;
2. Guarantor fails to make, when due, any payment required or to perform any other material covenant or obligation in any guaranty made in connection with this Agreement and such failure shall not be remedied within two (2) Business Days after written notice;

3. Guarantor's guaranty fails to be in full force and effect for purposes of this Agreement (other than in accordance with its terms) prior to the satisfaction of all obligations of such Party under this Agreement without the written consent of the other Party; or
4. Guarantor repudiates, disaffirms, disclaims, or rejects, in whole or in part, or challenges the validity of any guaranty.

5.2 Rights upon Default

Upon and during the continuation of an Event of Default, the Non-Defaulting Party shall have the right to suspend performance, provided that such suspension shall not continue for longer than ten (10) Business Days. At any time during or subsequent to the temporary suspension of performance, the Non-Defaulting Party may proceed with the steps outlined in Article 5.7. In addition to any other remedies available at law or in equity to the Non-Defaulting Party, if an Event of Default has occurred and is continuing, the Non-Defaulting Party shall have the right to implement all of the following remedies:

- (i) Declare an Early Termination Date of this Agreement with respect to the obligations of the Defaulting Party without any liability or responsibility whatsoever except for obligations arising prior to the date of termination, by providing written notice to the Defaulting Party; provided, however, that this Agreement shall immediately terminate automatically and without notice in the case of any Event of Default in which a DS Supplier is the Defaulting Party occurring under subsections (i), (ii), (iii), (iv), (v), (vi), (vii) or (viii) of Article 5.1 of this Agreement and such date of automatic termination shall be deemed the Early Termination Date of this Agreement with respect to such Supplier; and

- (ii) Receive Damages in accordance with Section 5.3 of this Agreement.

The Non-Defaulting Party shall be entitled to elect or pursue one or more of the above remedies.

5.3 Damages Resulting from an Event of Default

(a) **DS Supplier's Failure to Supply DS Supply or Declaration of Early Termination By Company:** Damages resulting from (i) the DS Supplier's failure to (A) provide DS Supply in conformance with Article 2.2 hereof or (B) pay PJM for purchases of any products or services from PJM, or other failure to comply with PJM requirements, such that PJM holds the Company responsible for the provision of DS Supply to meet the DS Supplier's DS Supplier Responsibility Share under this Agreement or (ii) the occurrence of any Event of Default attributable to the DS Supplier resulting in Early Termination, shall include all Costs incurred by the Company, acting in a commercially reasonable manner consistent with any statutory or regulatory requirements imposed by the Applicable Legal Authorities, in obtaining replacement services and/or in obtaining a replacement supplier, which Costs exceed the amounts that would have been payable to the defaulting DS Supplier under this Agreement. Costs incurred by the Company for the purpose of calculating Damages hereunder will consist of:

- (i) The cost of DS Supply allocated to the Company by the PJM OI due to the failure of the DS Supplier to meet obligations owing to the PJM OI in connection with its obligations under this Agreement;

- (ii) The costs of DS Supply purchased by the Company to replace DS Supply that a DS Supplier was obligated to supply under this Agreement during the term hereof;

- (iii) Administrative and legal costs associated with procuring replacement DS

Supply; and

(iv) Financial hedging costs incurred by the Company on behalf of DS Customers as a result of having to procure DS Supply not provided by the DS Supplier.

The Parties further recognize and agree that the final calculation of Damages hereunder may not be known for some time since the level of such Damages may be dependent upon the arrangements made by the Company to obtain replacement services or a replacement DS Supplier. The Company and the DS Supplier agree that, until the calculation of Damages under this provision is completed, the amount and payment to the Company of the Settlement Amount on behalf of DS Customers in the event of an Early Termination as set forth in Article 5.4 of this Agreement shall be immediately due and owing as an estimate of all Damages ultimately determined to be due and owing. After Damages have been finally determined under this Article 5.3, the amounts of Damages due and owing will be reconciled with payments already made by the DS Supplier under Section 5.4 of this Agreement.

(b) Failure by Company on Behalf of Customers to Accept DS Supply Properly Tendered by DS Supplier: Damages resulting from the failure of the Company on behalf of Customers to accept DS Supply properly tendered by the DS Supplier necessary to meet the DS Supplier Responsibility Share of DS Load under this Agreement shall consist of the positive difference (if any) between (i) the amounts that would have been payable to the DS Supplier hereunder had the Company accepted the DS Supply properly tendered by the DS Supplier necessary to meet the DS Supplier Responsibility Share of DS Load under this Agreement and (ii) the amount realized by the DS Supplier in disposing, in a commercially reasonable manner, of the DS Supply not accepted by the

Company; provided, however, that the Company shall not be liable for any Damages if this Agreement is terminated, or modified so as to frustrate or effectively preclude Company's acceptance of the DS Supply, by the PaPUC, other regulatory authority or a court of law.

(c) **Damages Resulting from Early Termination Due to an Event of Default Attributable to the Company:** Damages resulting from Early Termination due to an Event of Default attributable to the Company shall be as set forth in Section 5.4 of this Agreement. Damages calculated in accordance with said Article 5.4 shall be the exclusive remedy available to the DS Supplier in the event of Early Termination resulting from an Event of Default attributable to the Company.

(d) **Damages Resulting from DS Supplier's Failure to Continuously Satisfy its Obligations Associated with the AEPS Obligations:** Damages resulting from the DS Supplier's failure to continuously meet and satisfy all or any portion of its obligations under Section 2.2 (a)(viii) of this Agreement shall include, but not be limited to, the amount of all penalties (including Alternative Compliance Payments), costs associated with the procurement of additional AECs, -etc., including, without limitation, interest and other charges, if any, levied against the Company related to AEPS regulations, due to such DS Supplier's conduct or inaction. DS Supplier has a specific obligation to provide the AECs conforming to PaPUC requirements and not money damages in substitution. Therefore, any such attempt to supply money damages instead of AECs may be treated as an event of default in the sole discretion of Company.

(e) **Other Damages:** Damages for Events of Default not specified above shall consist of the direct Damages incurred by the Non-Defaulting Party.

(f) **Waiver of Event of Default:** If an Event of Default has occurred and the

Non-Defaulting Party is the Company, then unless the Event of Default was a failure by the DS Supplier to meet any or all of its DS Supply obligations, the Company may elect, at its sole discretion, to offer to waive the default on such terms and conditions as the Company, at its sole discretion, may deem appropriate to propose a special remedy. Any such special remedy can only be offered to the DS Supplier if it first is specifically approved by the PaPUC in accordance with Commission Orders.

5.4 Declaration of an Early Termination Date and Calculation of Settlement Amount and Termination Payment

(a) Settlement Amount

If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the Non-Defaulting Party shall have the right (i) to designate a day, no earlier than the day such notice is effective and no later than twenty (20) days after such notice is effective, as a date for Early Termination (“Early Termination Date”) to accelerate all amounts owing between the Parties and to liquidate and terminate the undertakings set forth in this Agreement, (ii) to withhold any payments due to the Defaulting Party under this Agreement, and (iii) to suspend performance; provided, however, that an Early Termination Date shall be deemed to occur automatically and concurrently with the Event of Default, without any requirement for the provision of notice by the Non-Defaulting Party, with respect to an Event of Default under subsections (i), (ii), (iii), (iv), (v), (vi), (vii), and (viii) of Article 5.1 of this Agreement. The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount with respect to the obligations under this Agreement.

“ The DS Supplier may, in its sole discretion, add the following subsection 5.4(a)(i) by checking this box. If DS Supplier does not check this box, subsection 5.4(a)(i) will be deemed to be excluded from this Agreement.”

(i) For the purposes of such determination, the DS Supply provided for under this Agreement for the period following the Early Termination Date through the remainder of the term of this Agreement shall be deemed to be those quantity amounts that would have been delivered on an hourly basis, had this Agreement been in effect during the previous calendar year adjusted for such DS Load changes as may have occurred since the previous calendar year.

(b) Net Out of Settlement Amounts

The Non-Defaulting Party shall calculate a Termination Payment by aggregating all Settlement Amounts due under this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply into a single amount by netting out (a) all Settlement Amounts that are due or will become due to the Defaulting Party, plus at the option of the Non-Defaulting Party, any cash or other form of security then available to the Non-Defaulting Party and actually received, liquidated and retained by the Non-Defaulting Party, plus any or all other amounts due to the Defaulting Party under this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply against (b) all Settlement Amounts that are due or will become due to the Non-Defaulting Party, plus any or all other amounts due to the Non-Defaulting Party under this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply, so that all such amounts shall be netted out to a single liquidated amount; provided, however, that if the DS Supplier is the Defaulting Party and the Termination Payment is due to the DS Supplier, the Company shall be entitled to retain a commercially reasonable portion of the Termination Payment, which may be equal to the entire amount of the Termination Payment, as security for

additional amounts that may be determined to be due and owing by the DS Supplier as Damages and further provided that any previously attached security interest of the Company in such retained amounts shall continue. The Termination Payment shall be due to or due from the Non-Defaulting Party as appropriate. If the Termination Payment has been retained by the Company as security for additional amounts that may be determined to be due and owing by the DS Supplier, and if, upon making a final determination of Damages, the Termination Payment, or any portion thereof, is to be made to the DS Supplier, the Company will pay simple interest on the Termination Payment amount being made to the DS Supplier. Simple interest will be calculated at the lower of the Interest Index or six (6) percent per annum.

(c) Notice of Termination Payment

As soon as practicable after calculation of a Termination Payment, notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to or due from the Non-Defaulting Party. The notice shall include a written statement explaining in reasonable detail the calculation of such amount. Subject to Article 5.4(b) above, the Termination Payment shall be made by the Party that owes it within three (3) Business Days after such notice is effective.

(d) Disputes With Respect to Termination Payment

If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within three (3) Business Days of receipt of Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis

for such dispute; provided, however, that if the Termination Payment is due from the Defaulting Party, the Defaulting Party shall first transfer collateral to the Non-Defaulting Party in an amount equal to the Termination Payment, such collateral to be in a form acceptable to the Non-Defaulting Party as specified in the Termination Payment Dispute Notice.

(e) Multiple DS Supply Agreements

It is the intention of the Company and the DS Supplier that, in the event the DS Supplier is a party to other agreements with the Company for the provision of DS Supply that existed prior to the Effective Date of this Agreement or are entered into after the Effective Date of this Agreement, the Company will calculate a single Termination Payment applicable to all such agreements as set forth herein.

5.5 Step-up Provision

The Company may ask other DS Suppliers whether they wish to assume all or part of the delivery obligations on the same terms and price contained herein, but any DS Supplier shall not be obligated to assume any such step-up requests. Any agreement to make additional supply available shall be termed a "Step-Up," and is subject to compliance with the creditworthiness provisions of Article 6 of this Agreement and the DS Supplier's load cap as per the Company's approved default service procurement plan. For the avoidance of doubt, in the event that the DS Supplier does not respond to the Company's Step-Up request within the relevant timeframe, then the DS Supplier shall be deemed to have rejected the Company's request in full.

5.6 Setoff of Payment Obligations of the Non-Defaulting Party

Any payment obligations of the Non-Defaulting Party to the Defaulting Party

pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply shall be set off: (i) first, to satisfy any payment obligations of the Defaulting Party to the Non-Defaulting Party pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply that are unsecured and not subject to any Guaranty; (ii) second, to satisfy any payment obligations of the Defaulting Party to the Non-Defaulting Party pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply that are unsecured, but which are subject to a Guaranty; and (iii) third, to satisfy any remaining payment obligations of the Defaulting Party to the Non-Defaulting Party pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply.

5.7 Preservation of Rights of Non-Defaulting Party

The rights of the Non-Defaulting Party under this Agreement, including without limitation Articles 5.4 and 5.7 of this Agreement, shall be supplemental to, and not in lieu of, any right of recoupment, lien, or set-off afforded by applicable law, and all such rights are expressly preserved for the benefit of the Non-Defaulting Party.

- (a) Duty to Mitigate. Each Party agrees that it has a duty to mitigate damages and covenants that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's failure to perform pursuant to this Agreement.

- (b) Return of Auction Revenue Rights. When the DS Supplier is the Defaulting Party, the DS Supplier will make best efforts to facilitate the transfer or reassignment to the entity which is the replacement DS

Supplier on the Early Termination Date, any and all of the replacement DS Supplier's rights to Auction Revenue Rights (ARRs) to which the replacement DS Supplier is entitled as a LSE pursuant to the PJM Agreements, which were transferred or assigned to the DS Supplier under Section 2.3 (Congestion and Congestion Management).

ARTICLE 6: CREDITWORTHINESS

6.1 Applicability

The DS Supplier agrees that it shall meet the creditworthiness requirements of this Article 6 at all times during the term of this Agreement and shall inform the Company immediately of any changes in its credit rating or financial condition. Without limitation of the foregoing, the DS Supplier shall, upon written request, affirmatively demonstrate to the Company, its compliance with the creditworthiness requirements set forth hereunder. The Company may establish less restrictive creditworthiness requirements under this Article 6 in a non-discriminatory manner.

6.2 Creditworthiness Determination

The DS Supplier may submit and maintain a security deposit in accordance with Section 6.4 of this Agreement in lieu of submitting to or being qualified under a creditworthiness evaluation. The DS Supplier shall have the opportunity to request that the Company re-evaluate its creditworthiness whenever an event occurs that the DS Supplier believes would improve the determination made by the Company of its creditworthiness. The Company's credit re-evaluation must be completed as soon as possible ~~possible~~ practicable but no longer than thirty (30) days after receiving a fully documented request. The Company must provide the rationale for its determination of the credit limit

and any resulting security requirement. The Company must perform its credit re-evaluation and associated security calculation in a non-discriminatory manner. DS Supplier shall provide the Company and its agent's unrestricted access to ~~current~~most recent audited financial statements; provided that if current audited financial statements are not available, the Company, in its sole discretion, may specify other types of financial statements that will be accepted.

6.3 Mark-to-Market Credit Exposure Methodology

To calculate the daily exposure for each DS Supplier, the MtM credit exposure methodology will be used. The "mark" for each Billing Month will be determined at the time the auction is completed based on the available Forward Market Prices, and for the remaining Billing Months, it will be derived based on historical data. At the time the auction is completed, the MtM credit exposure for each DS Supplier shall be equal to zero. Subsequently, the differences between the available Forward Market Prices on the valuation date and the "mark" prices for the corresponding Billing Months will be used to calculate the daily credit exposures for each DS Supplier. The total MtM credit exposure will be equal to 1.1 times the sum of the MtM credit exposures for each Billing Month. The methodology for calculation of the MtM credit exposure is illustrated in the example (using hypothetical numbers) set forth in Appendix B hereto.

6.4 Credit Limit

The following criteria constitute the Company's creditworthiness requirements for the DS Supplier, to cover the Total Exposure Amount. In all instances, the most current senior unsecured debt rating (or, if unavailable, the most current corporate issuer rating) will be used.

(i) For a DS Supplier to be granted an unsecured line of credit, the DS Supplier must be rated by at least two of the following rating agencies: S&P, Moody's, or Fitch. The methodology for determining the credit rating to use is set forth in Appendix A of this Agreement. The Maximum Credit Limit to cover the Total Exposure Amount will be determined based on the credit matrix table in Appendix A of this Agreement.

The DS Supplier will be required to post cash or a letter of credit in an acceptable form as defined in Section 6.7 (b) of this Agreement (see standard format in Exhibit 4) for the Margin due the Company as set forth in Section 6.5 of this Agreement;

(ii) For a DS Supplier having a Guarantor, in the case of a Guarantor organized under the laws of the United States, the Guarantor (1) must be rated by at least two of the following rating agencies: S&P, Moody's, or Fitch, and (2) must have a minimum senior unsecured debt rating (or, if unavailable, corporate issuer rating) equal to the Minimum Rating. If the Guarantor is rated by only two rating agencies, and the ratings are split, the rating will be established based on the methodology outlined in Appendix A of this Agreement. The Maximum Credit Limit to cover the Total Exposure Amount that could be provided through the Guaranty (see standard format in Exhibit 5) will be determined based on the credit matrix table for Guarantors in Appendix A. The DS Supplier will be granted a credit limit equal to the lesser of (i) the amount of the Guaranty as provided to the Company at the time this Agreement is executed as such amount may be modified in any amended or substitute Guaranty provided to the Company during the term of this Agreement, or (ii) the Supplier's Maximum Credit Limit. The DS Supplier, however, may not increase or substitute its Guaranty for the purpose of increasing its applicable credit limit during the time period after the Company has made a Margin call but before the DS

Supplier has posted the required Margin. Notwithstanding anything herein to the contrary, the DS Supplier may increase the limit of its Guaranty after satisfying a Margin call from the Company and upon the Company's receipt of an amended or substitute Guaranty increasing the limit of the Guaranty, the DS Supplier may request a return of Margin in accordance with Section 6.5 of this Agreement. The DS Supplier will be required to post cash or a letter of credit in an acceptable form as defined in Section 6.7(b) of this Agreement (see standard format in Exhibit 4) for the Margin due the Company as set forth in Section 6.5 of this Agreement; or

(iii) For a DS Supplier or Guarantor that has not been incorporated or otherwise formed under the laws of the United States and whose financial data is not denominated in United States currency and does not conform to generally accepted accounting principles ("GAAP") in the United States, the DS Supplier or Guarantory shall meet all requirements of Sections 6.4(i) and (ii) of this Agreement and shall supply the following additional information:

- a. A legal opinion of counsel qualified to practice in the foreign jurisdiction in which the DS Supplier or Guarantor is incorporated or otherwise formed that this Agreement is, or upon completion of execution formalities will become, the binding obligation of the DS Supplier or Guarantor in the jurisdiction in which it has been incorporated or otherwise formed;
- b. The sworn certificate of the corporate secretary (or similar officer) of such DS Supplier or Guarantor that the person executing this Agreement on behalf of the DS Supplier has the authority to execute

the Agreement and that the governing board of the DS Supplier or Guarantor has approved the execution of this Agreement;

- c. The sworn certificate of the corporate secretary (or similar officer) of such DS Supplier or Guarantor that the DS Supplier or Guarantor has been authorized by its governing board to enter into agreements of the same type as this Agreement; and
- d. Such other documents and certificates as may be required by the Company in its sole discretion.

(iv) The posting of cash or a letter of credit as defined in Section 6.7 (b) below for the entire Total Exposure Amount as set forth in Section 6.5 of this Agreement.

6.5 Posting Margin and Return of Surplus Margin

(a) If at any time and from time to time during the term of this Agreement the Total Exposure Amount, rounded up by the Rounding amount, exceeds the DS Supplier's or the Guarantor's credit limit by the Minimum Transfer Amount (MTA), then the Company, on any Business Day, may request that the DS Supplier provide cash or a letter of credit in an acceptable form as defined in Article 6.7(b) of this Agreement (see standard format in Exhibit 4), in an amount equal to the Margin (less any Margin posted by the DS Supplier and held by the Company pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply).

If the DS Supplier receives written notice for Margin from the Company by 1:00 p.m. New York time on a Business Day, then the DS Supplier shall post Margin the next following Business Day, if posting cash, and by the second Business Day following the date of notice, if posting a letter of credit, unless the Company agrees in writing to extend

the period to provide Margin. If the DS Supplier receives notice for Margin from the Company after 1:00 p.m. New York time on a Business Day, whether posting cash or a letter of credit, then the DS Supplier must post Margin the second Business Day following the date of notice unless the Company agrees in writing to extend the period to provide Margin. The Company will not unreasonably deny a request for a one-day extension of such period. In the event that the DS Supplier fails to post Margin when due in accordance with this Article 6.5, then an Event of Default under Article 5 of this Agreement will be deemed to have occurred and the Company will be entitled to the remedies set forth in Article 5 of this Agreement.

(b) Surplus Margin being held by the Company that is not needed to satisfy the Total Exposure Amount, as determined above, will be returned to the DS Supplier upon receipt of a written request by the DS Supplier. Surplus Margin means cash or a letter of credit posted by the DS Supplier as a result of a request by the Company pursuant to Article 6.5(a) that exceeds the Total Exposure Amount less the DS Supplier's or the Guarantor's credit limit (rounded up by the Rounding Amount). If the resulting Surplus Margin amount is more than the Minimum Transfer Amount, it will be returned to the DS Supplier. If the DS Supplier posted cash and notice is received by 1:00 p.m. New York time on a Business Day, the surplus Margin will be returned by the next following Business Day and if the DS Supplier posted cash and notice is received by the Company after 1:00 p.m. New York time on a Business Day, the surplus Margin shall be returned by the second Business Day following the date of notice, unless the DS Supplier agrees in writing to extend the period to return the surplus Margin. If the DS Supplier posted a letter of credit, the surplus Margin shall be returned on the next Business Day following the Business Day on which the

amendment to the letter of credit is received from the issuing bank, unless the DS Supplier agrees in writing to extend the period to return the surplus Margin. The DS Supplier will not unreasonably deny a request for a one-day extension of such period. In the event that the Company fails to return the surplus Margin when due in accordance with this Article, then an Event of Default under Article 5 of this Agreement will be deemed to have occurred and the DS Supplier will be entitled to the remedies set forth in Article 5 of this Agreement.

6.6 Grant of Security Interest/Remedies

To secure its obligations under this Agreement and to the extent that the DS Supplier posted Margin/collateral hereunder, the DS Supplier hereby grants to the Company a present and continuing security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, the Company, and the DS Supplier and the Company agree to take such action as is reasonably required to perfect the secured Party's first priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, the Company may do any one or more of the following: (i) exercise any of the rights and remedies of the Company with respect to all collateral, including any such rights and remedies under law then in effect; (ii) exercise its rights of setoff against any and all property of the DS Supplier in the possession of the Company, whether held in connection with this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply; (iii) draw on any

outstanding letter of credit issued for its benefit; and (iv) liquidate all security held by or for the benefit of the Company free from any claim or right of any nature whatsoever of the DS Supplier, including any equity or right of purchase or redemption by the DS Supplier. The Company shall apply the proceeds of the collateral realized upon the exercise of such rights or remedies to reduce the DS Supplier's obligation under this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply (the DS Supplier remaining liable for any amounts owing to the Company after such application), subject to the Company's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

All notices, demands or requests regarding credit requirements and credit related security or deposit transfers shall be in writing and shall be personally delivered or sent by overnight express mail, courier service or ~~facsimile~~ electronic mail transmission (with the original transmitted by any of the other aforementioned delivery methods, unless agreed to otherwise by the parties) addressed as follows:

If to a DS Supplier to:

Copy to:

If to the Company to: James H. Milligan, ~~Assistant~~ Treasurer

Duquesne Light Company

Mail Drop 7-3

411 Seventh Avenue, Pittsburgh, PA 15219

jmilligan@duqlight.com

Copy to: ~~Joan Jenkins, Procurement Analyst~~ Energy Procurement

Mail Drop 15-1

Duquesne Light Company

411 Seventh Avenue, Pittsburgh, PA 15219
energysupply@duqlight.com

Notice received after the close of the Business Day shall be deemed received on the next Business Day; provided that notice by ~~facsimile~~ electronic mail transmission shall be deemed to have been received by the recipient if the recipient confirms receipt telephonically, ~~or in writing,~~ or by responding in the same electronic mail conversation chain.

6.7 Security Instruments

At each DS Supplier's choice, the following are deemed to be acceptable methods for posting security, if required:

- (a) Cash; or
- (b) A standby irrevocable letter of credit acceptable to the Company, in its sole discretion, issued by a domestic bank (or a domestic branch of an international bank) or other domestic financial institution (or a domestic branch of an international financial institution) with a minimum "A-" senior unsecured debt rating (or, if unavailable, equivalent corporate issuer rating ~~discounted one notch~~) from S&P or Fitch and "A3" from Moody's (see standard format in Exhibit 4). The letter of credit shall state that it shall renew automatically for successive one-year or shorter periods, until terminated upon at least ninety (90) days prior written notice from the issuing financial institution. If the Company receives notice from the issuing financial institution that the letter of credit is being cancelled, the DS Supplier will be required to provide a substitute letter of credit from an alternative bank satisfying the minimum requirements. The receipt of the substitute letter of credit must be effective as of the cancellation date and delivered to the

Company thirty (30) days before the cancellation date of the original letter of credit. If the DS Supplier fails to supply a substitute letter of credit as required, then the Company will have the right to draw on the existing letter of credit and to hold the amount as Margin.

If the credit rating of a bank or other financial institution from which a DS Supplier has obtained a letter of credit falls below the levels specified in Article 6 of this Agreement, the DS Supplier shall have two (2) Business Days following written notice by the Company to obtain a suitable letter of credit from another bank or other financial institution that meets those standards, unless such period is extended in writing by the Company. The Company shall have no obligation under this Agreement or otherwise to make or grant such extension.

6.8 Maintenance of Creditworthiness

(a) Reporting of Changes

The DS Supplier shall promptly notify the Company of any change in its credit rating or financial condition or that of its Guarantor. The DS Supplier or Guarantor shall also furnish evidence of an acceptable credit rating or financial condition upon the request of the Company.

(b) Change in Credit Standing

The Company will re-evaluate the creditworthiness of a DS Supplier whenever it becomes aware of an adverse change, through the provision of notice by the DS Supplier or otherwise, in the DS Supplier's or Guarantor's credit standing. If the lowest credit rating (whether senior unsecured debt rating or corporate issuer rating) used to determine the DS Supplier's Maximum Credit Limit or its credit limit adversely changes, the Company will require additional security from the DS Supplier in accordance with Sections 6.4 of this

Agreement. The additional security must be in a form acceptable to the Company in its sole discretion, as specified in Article 6.7 of this Agreement and must be posted as set forth in Section 6.5 of this Agreement.

6.9 Calling on Security

The Company may call upon the security posted by the DS Supplier if the DS Supplier fails to pay amounts due to the Company pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply after all of the following events occur:

- (a) Written Notice of Default is provided to the DS Supplier; and
- (b) Any applicable cure period associated with the written Notice of Default ends.

The foregoing notwithstanding, the security posted by the DS Supplier shall become due automatically without prior notice or right of cure in the case of any Event of Default arising under subsections (i), (ii), (iii), (iv), (v), (vi), (vii) and (viii) of Section 5.1 of this Agreement.

6.10 Interest on Cash Held by Company

The Company will pay simple interest calculated at the lower of the Interest Index or six (6) percent per annum on all cash held by the Company pursuant to this Agreement. Each Billing Month, the Company will prepare a statement of interest amounts due to the DS Supplier. The statement will be sent to the DS Supplier within three (3) Business Days after the end of the Billing Month via overnight mail or other expeditious means. The Company shall make interest payments on the first Business Day after the 5th day of each calendar month.

6.11 No Endorsement of DS Supplier

The Company's determination that a DS Supplier is creditworthy pursuant to the process set forth above, shall not be deemed to constitute an express or implied warranty or guarantee of any kind with respect to the financial or operational qualifications of the DS Supplier. The Company will treat all DS Suppliers in a non-discriminatory manner and shall provide no preference to any DS Supplier.

6.12 Multiple DS Supply Agreements

It is the intention of the Company and the DS Supplier that, in the event the DS Supplier is a party to other agreements with the Company for the provision of DS Supply that existed prior to the effective date of this Agreement or is entered into after the effective date of this Agreement, the Company will calculate the Margin applicable to all such agreements as set forth in Appendix A of this Agreement; provided, however, that if another agreement has a more stringent credit threshold, then the more stringent credit threshold shall apply. Each DS Supplier that is a party to such other agreements with the Company for the provision of DS Supply hereby agrees that such other agreements are deemed amended by this Agreement for the purpose of calculating the Margin as described herein.

**ARTICLE 7: PROCEDURES FOR ENERGY SCHEDULING,
CAPACITY RESOURCE SUBMISSION AND
TRANSMISSION PROCUREMENT**

7.1 Load Obligations

The Company and the DS Supplier acknowledge and agree that (1) the Company shall determine the DS Load, (2) the Company shall allocate the DS Supply obligation using the DS Supplier Responsibility Share, (3) the Company shall provide the DS

Supplier's DS Supply obligation to PJM, and (4) the DS Supplier shall be responsible for meeting its DS Supply obligations as a LSE under the PJM Agreements.

7.2 Data Transmission

The procedures for transmitting load obligation data to PJM for DS Supplier's DS Load shall be as set forth by PJM.

7.3 Energy Scheduling

The Company is not obligated to provide any day ahead scheduling services. If the Company chooses to provide such services, the information provided is not guaranteed by the Company.

ARTICLE 8: THE ENERGY SETTLEMENT/RECONCILIATION PROCESS

8.1 Energy Settlement by PJM

The settlement process occurs at PJM to reflect the DS Supplier's actual Energy obligations in a supply/usage reconciliation process. The Energy obligations for each DS Supplier will be determined based on the DS Supplier Responsibility Share of the DS Load. The reconciled total DS Energy obligation will be based on the final total Energy loads for the Customers receiving DS service, including de-ration adjustments for marginal losses.

Any adjustments for billing and metering errors reported subsequent to the calculation of FMEA will be proportionally allocated by the Company to the DS Suppliers based on the respective DS Supplier Responsibility Share.

8.2 Energy Settlement by the Company

In the event that actual DS Customer consumption data is not available until after the PJM deadline for conducting the final settlement, the Company will conduct the

settlement process with the DS Supplier. In the event PJM imposes penalties against the Company as a result of the DS Supplier's Transactions or failure to meet PJM requirements, such penalties shall be passed through by the Company to the DS Supplier as part of this settlement process. In addition, all other applicable charges from PJM, including any billing adjustments, will be appropriately allocated to the DS Supplier.

ARTICLE 9: BILLING AND PAYMENT

9.1 The Company Payment of Obligations to the DS Supplier

The Company shall pay all amounts due to the DS Supplier hereunder in accordance with the following provisions:

(a) Each Billing Month, the Company will prepare a Statement of amounts due to the DS Supplier.

- For Fixed Price Transactions, this Statement will show the aggregate amounts due based on the DS Fixed Price multiplied by the hourly Energy requirements of DS Supply used to determine the PMEA multiplied by the DS Fixed Percentage as shown in Appendix C for each hour of the Billing Month.
- For Hourly Price Transactions, this Statement will show the aggregate amounts due based on the DS Fixed Price Adder For Hourly Price Service multiplied by the hourly Energy requirements of DS Supply used to determine the PMEA multiplied by the DS Fixed Percentage as shown in Appendix C for each hour of the Billing Month, plus the DS Variable Payments used to determine the PMEA for each hour of the Billing Month.

(b) The Statement will be sent to the DS Supplier within eight (8) Business Days after the end of the Billing Month via overnight mail or other expeditious means.

(c) The Company shall make payment on the first Business Day after the 19th day of each calendar month.

(d) To the extent that the FMEA differs from the PMEA, the Company shall pay or charge the DS Supplier for the PMEA/FMEA Adjustment Amount within the PJM deadline for conducting the final settlement.

(e) If each Party owes an amount to the other Party pursuant to this Agreement, including any related interest, payments or credits, the Parties may satisfy their respective obligations to each other by netting the aggregate amounts due to one Party against the aggregate amounts due to the other Party, with the Party, if any, owing the greater aggregate amount paying the other Party the difference between the amounts owed.

(f) Payments shall be subject to adjustment for any arithmetic errors, computation errors, meter reading errors, or other errors, provided that the errors become known within one (1) year of the termination of this Agreement.

(g) The Company shall make payments of funds payable to the DS Supplier by electronic transfer to a bank designated by the DS Supplier.

(h) If a good faith dispute arises between the Company and the DS Supplier regarding a Statement, the disputing Party shall be obligated to pay only the undisputed portion of the Statement, if any, and shall present the dispute in writing and submit supporting documentation to the non-disputing Party within one hundred twenty (120) calendar days from the date of the Statement in dispute. Statement disputes shall be

addressed promptly and in accordance with the dispute resolution procedures set forth in Article 11 of this Agreement. Upon resolution of a Statement dispute, any payments made to either Party will include simple interest on the payment at the lower of the Interest Index or six (6) percent per annum payable from the date that notice of a Statement dispute was received by the non-disputing Party.

(i) If payment is made to the DS Supplier after the due date shown on the Statement, a late fee will be added to the unpaid balance until the entire Statement is paid. This late fee shall be the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in The Wall Street Journal under "Money Rates" on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) or (b) the maximum rate permitted by applicable law.

(j) If Seller does enter more than one transaction with Buyer, Buyer may provide a single invoice listing the relevant information detailed.

9.2 Billing for DS Supplier's Obligations to Other Parties

The Company shall have no responsibility for billing between the DS Supplier and PJM; the DS Supplier and any Energy or Capacity source; or the DS Supplier and any other third party. The Company will be solely responsible for billing DS Customers for Default Service.

9.3 The DS Supplier Payment of Obligations to the Company

The DS Supplier shall pay all Charges it incurs hereunder in accordance with the following provisions:

(a) Each Billing Month, the Company shall submit an invoice to the DS

Supplier for all Charges owed by the DS Supplier under this Agreement. The DS Supplier shall make payment for Charges shown on the invoice. The due date will be on the first Business Day after the 19th day of each calendar month. The invoice will be sent to the DS Supplier within eight (8) Business Days after the end of the Billing Month via overnight mail or other expeditious means.

(b) Invoices shall be subject to adjustment for any arithmetic errors, computation errors, meter reading errors, or other errors, provided that the errors become known within one (1) year of the termination of this Agreement.

(c) The DS Supplier shall make payments of funds payable to the Company by electronic transfer to a bank designated by the Company.

(d) If a good faith dispute arises between the Company and the DS Supplier regarding an invoice, the disputing Party shall pay only the undisputed portion of the invoice, if any, and shall present the dispute in writing and submit supporting documentation to the non-disputing Party within one hundred twenty (120) calendar days from the due date of the invoice in dispute. Billing disputes shall be addressed promptly, and in accordance with the dispute resolution procedures set forth in Article 11 of this Agreement. Upon resolution of a billing dispute, any payments made to either Party will include simple interest on the payment at the lower of the Interest Index or six (6) percent per annum payable from the date that notice of a bill dispute was received by the non-disputing Party.

(e) If payment is made to the Company after the due date shown on the invoice, a late fee will be added to the unpaid balance until the entire invoice is paid. This late fee shall be the lesser of (a) the per annum rate of interest equal to the prime lending rate as

may from time to time be published in The Wall Street Journal under "Money Rates" on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) or (b) the maximum rate permitted by applicable law.

ARTICLE 10: SYSTEM OPERATION

The Parties shall adhere to any applicable operational requirements of PJM necessary to protect the integrity of the transmission system within the PJM Control Area and the transmission systems of interconnected control areas, and shall satisfy any and all PJM, RFC and NERC criteria, when applicable. The DS Supplier shall also adhere to any applicable operational requirements of the Company necessary to protect the integrity of the Company's local distribution system.

10.1 Disconnection and Curtailment by the Company

The Company shall have the right, without incurring any liability to the DS Suppliers, to disconnect (or otherwise curtail, interrupt or reduce deliveries from) the DS Suppliers or to disconnect (or otherwise curtail, interrupt or reduce deliveries to) any Customer whenever the Company determines in the exercise of its good faith discretion, or when the Company is directed by PJM, that such a disconnection, curtailment, interruption or reduction is necessary to facilitate construction, installation, maintenance, repair, replacement or inspection of any of the Company's facilities, or due to any other reason affecting the safe and reliable operation of the Company's or a Customer's facilities, including, without limitation, an Emergency, forced outage or potential overloading of the Company's transmission and/or distribution circuits, potential damage to any Customer's facilities or any risk of injury to persons or property.

10.2 Inadvertent Loss of Service to DS Customers

The Parties agree and acknowledge that service to DS Customers may be inadvertently lost due to storms, weather, accidents, breakage of equipment or other events beyond the reasonable control of the Company affecting the transmission and distribution system of the Company. Neither Party will have any liability to the other Party for the occurrence of such events except for the Company's obligation to pursue steps for the resumption of the disrupted service as set forth in Section 10.3 below. In no event will an inadvertent loss of service affect a Party's obligation to make any payments then due or becoming due with respect to performance rendered prior to such inadvertent loss of service.

10.3 Good Faith Efforts

The Company shall use good faith efforts to minimize any curtailment, interruption or reduction in service to DS Customers to the extent reasonably practicable under the circumstances.

10.4 PJM Requirements

The DS Supplier acknowledges and agrees that, as a member of PJM, the Company is bound by all PJM operating instructions, policies and procedures as are currently set forth in the PJM Operating Manual, which are available through the Internet on the PJM Home Page (<http://www.pjm.com>), as may be revised from time to time, which are needed to maintain the integrity of the PJM system. The DS Supplier acknowledges and agrees that it will cooperate with the Company so that the Company will be in compliance with all PJM Emergency Operations Procedures, which include, but are not limited to, those procedures pertaining to minimum and maximum generation Emergencies, and measures requiring involuntary Customer participation, such as supply voltage reduction or full

interruption of Customer load by either manual or automatic means.

10.5 Compliance with Governmental Directives

The DS Supplier also acknowledges and agrees that the Company may need to act in response to governmental or civil authority directives which may affect DS Customer load. The DS Supplier agrees to cooperate with the Company in order to comply with said directives.

ARTICLE 11: DISPUTE RESOLUTION

11.1 Informal Resolution of Disputes

Before pursuing resolution of any dispute arising out of this Agreement (other than an Event of Default under Article 5.1(i)-(ix), (xii), or (xvi)), the disputing Party shall provide written notice to the other Party setting forth the nature of the dispute, the amount involved, if any, and the remedies sought. The Parties shall use good faith and reasonable commercial efforts to informally resolve such dispute. Such efforts shall last for a period of at least thirty (30) calendar days from the date that the notice of the dispute is first delivered from one Party to the other Party. Any amounts that are owed by one Party to the other Party as a result of resolution of a dispute pursuant to this Article 11.1 (Informal Resolution of Disputes), shall be paid within two (2) Business Days of such resolution and the payment shall include interest calculated at the Interest Index from the original due date through the date of payment.

11.2 Recourse to Agencies or Courts of Competent Jurisdiction

After the requirements of Article 11.1 (Informal Dispute Resolution) have been satisfied, all unresolved disputes, except as noted below, between the Parties shall be submitted to the appropriate authority. Nothing in this Agreement shall restrict the rights

of either Party to file a complaint with the FERC under relevant provisions of the Federal Power Act (“FPA”), with the PaPUC under relevant provisions of the Applicable Legal Authorities, with the Allegheny County Court of Common Pleas or with the Western District of Pennsylvania Federal Court. The Party’s agreement hereunder is without prejudice to any Party’s right to contest the jurisdiction of the agency or court ~~listed above~~ to which a complaint is brought.

The Parties hereby acknowledge and agree that both Parties have negotiated and entered into this Agreement freely and in good faith and that the terms of this Agreement have not been affected in any way, either directly or indirectly, by (A) any fraud, duress, unfairness, or any inequity in the relative bargaining power of the Parties or (B) any manipulation, unlawful activity, disruption, anomaly, dysfunction, or other adverse market conditions of any type or description.

To the extent permitted by law and absent agreement to the contrary, each Party, for itself and its successors and assigns, hereby expressly and irrevocably waives its rights to argue before any governmental authority that any review, modification, or rescission of this Agreement should be considered under any standard of review other than the “public interest” standard set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956), affirmed by *Morgan Stanley Capital Group, Inc. v. Public Utility District No. 1 of Snohomish County, Washington, et al.*, 554 U.S. 527 (2008) (the “Mobile-Sierra Doctrine”).

ARTICLE 12: REGULATORY AUTHORIZATIONS AND JURISDICTION

12.1 Compliance with Applicable Legal Authorities

The Company and the DS Supplier are subject to, and shall comply with, all existing or future applicable federal, State and local laws, all existing or future duly-promulgated orders or other duly-authorized actions of PJM or of Applicable Legal Authorities.

12.2 FERC Jurisdictional Matters

The inclusion herein of descriptions of procedures or processes utilized by PJM or otherwise subject to the jurisdiction of FERC is intended solely for informational purposes. If anything stated herein is found by the FERC to conflict with or be inconsistent with any provision of the FPA, or any rule, regulation, order or determination of the FERC under the FPA or if any existing procedures or processes utilized by PJM are duly modified, the applicable FERC rule, regulation, order, determination or modification shall control. To the extent required under any provision of the FPA, or any rule, regulation, order or determination of the FERC under the FPA, the Company and/or the DS Supplier, if applicable, shall use reasonable commercial efforts to secure, from time to time, all appropriate orders, approvals and determinations from the FERC necessary to support this Agreement.

12.3 Energy Efficiency, Conservation, and Retail Market Programs

DS Supplier acknowledges that DS Customers may participate in energy efficiency and conservation programs offered by the Company (required by Applicable Legal Authorities or otherwise offered by the Company whether voluntarily or not), by PJM, or

by other third parties and, for the avoidance of doubt, any programs offered or conducted by the Company or other entities relating to or arising from the PaPUC's Investigation of Pennsylvania's Retail Electricity Market, PaPUC Docket No. I-2011-2237952 (including legislation enacted to address the Commission's Final Order in Docket No. I-2011-2237952), and that such participation may reduce or change the amount of DS Supply that DS Supplier is required to provide and the amount of monies it may receive under this Agreement. The Company shall have no obligation whatsoever to DS Supplier with respect to the effect, if any, of such programs. DS Supplier is solely responsible for determining the effect, if any, of such programs on future load requirements.

ARTICLE 13: LIMITATION OF REMEDIES, LIABILITY AND DAMAGES

13.1 Limitations on Liability

Except as set forth in this Agreement, there is no warranty of merchantability or fitness for a particular purpose, and any and all implied warranties are disclaimed. The Parties confirm that the express remedies and measures of Damages provided in this Agreement satisfy the essential purposes hereof. For breach of any provision for which an express remedy or measure of Damages is provided, such express remedy or measure of Damages shall be the sole and exclusive remedy, the obligor's liability shall be limited as set forth in such provision and all other remedies or Damages at law or in equity are waived. If no remedy or measure of Damages is expressly provided herein, the obligor's liability shall be limited to direct actual Damages only, such direct actual Damages shall be the sole and exclusive remedy, and all other remedies or Damages at law or in equity are waived. Unless expressly herein provided, neither Party shall be liable for consequential, incidental, punitive, exemplary or indirect Damages, lost profits or other business interruption

Damages, by statute, in tort or contract, under any indemnity provision or otherwise. It is the intent of the Parties that the limitations herein imposed on remedies and the measure of Damages be without regard to the cause or causes related thereto, including the negligence or any Party, whether such negligence by sole, joint or concurrent, or active or passive. To the extent any Damages required to be paid hereunder are liquidated, the Parties acknowledge that the Damages are difficult or impossible to determine, or otherwise obtaining an adequate remedy is inconvenient and the Damages calculated hereunder constitute a reasonable approximation of the harm or loss.

13.2 Risk of Loss

Solely for purposes of determining risk of loss and for determining the indemnity obligations under Article 14 of this Agreement, the Company shall be deemed to have custody and control of the electric Energy delivered by the DS Supplier upon receipt thereof ~~into~~ at the point of delivery identified in Appendix C ~~the Company's distribution system~~ and until delivery thereof at the retail electric meter of the Customer, and the DS Supplier shall be deemed to have custody and control of the DS Supply at all times prior to receipt thereof by the Company. The Party deemed to have custody and control of DS Supply shall be responsible for all loss or damage to property or injury or death to persons arising in connection with such DS Supply while in its custody and control and shall indemnify the other Parties with respect to same as set forth in Article 14 of this Agreement.

ARTICLE 14: INDEMNIFICATION

14.1 Indemnification

(a) Should the Company become the defendant in, or obligor for, any third party claims and/or liabilities for losses, penalties, expenses, damage to property, injury to

or death of any person including a Party's employees or any third parties, that were caused by or occur in connection with an act or omission of the DS Supplier with respect to an obligation arising under or in connection with this Agreement, or for which the DS Supplier has otherwise assumed liability under the terms of this Agreement, the DS Supplier shall defend (at the Company's option), indemnify and hold harmless the Company, its shareholders, board members, directors, officers and employees, from and against any and all such third party claims and/or liabilities, and shall appoint counsel at DS Supplier's expense, subject to the approval of Company, to defend any such claims or liabilities, except to the extent that a court of competent jurisdiction determines that the losses, penalties, expenses or damages were caused wholly or in part by the gross negligence or willful misconduct of the Company. The Company may, at its own expense, retain counsel and participate in the defense of any such suit or action.

(b) Should the DS Supplier (the "Indemnified DS Supplier") become the defendant in, or obligor for, any third party claims and/or liabilities for losses, penalties, expenses, damage to property, injury to or death of any person including a Party's employees or any third parties, that were caused by or occur in connection with an act or omission of the Company with respect to an obligation arising under or in connection with this Agreement, or for which the Company has otherwise assumed liability under the terms of this Agreement, the Company shall defend (at the option of the Indemnified DS Supplier), indemnify and hold harmless the Indemnified DS Supplier, its shareholders, board members, directors, officers and employees, from and against any and all such third party claims and/or liabilities, except to the extent that a court of competent jurisdiction determines that the losses, penalties, expenses or damages were caused wholly or in part

by the gross negligence or willful misconduct of the Indemnified DS Supplier. The Indemnified DS Supplier may, at its own expense, retain counsel and participate in the defense of any such suit or action.

(c) If either Party intends to seek indemnification under Article 14.1(a) or 14.1(b), as applicable, from the other Party, the Party seeking indemnification shall give the other Party notice of such claim within ninety (90) days of the later of the commencement of, or the Party's actual knowledge of, such claim or action. Such notice shall describe the claim in reasonable detail and shall indicate the amount, estimated if necessary, of the claim that has been, or may be, sustained by said Party. To the extent that the other Party will have been actually and materially prejudiced as a result of the failure to provide such notice, such notice will be a condition precedent to any liability of the other Party under the provisions for indemnification contained in this Agreement. Neither Party may settle or compromise any claim without the prior consent of the other Party; provided, however, said consent shall not be unreasonably withheld, conditioned or delayed.

14.2 Survives Agreement

The obligation of a Party to defend, indemnify, and hold harmless another Party under this Article shall survive termination of this Agreement and shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for either Party under any statutory scheme, including any Worker's Compensation Acts, Disability Benefit Acts or other Employee Benefit Acts.

ARTICLE 15: FORCE MAJEURE

15.1 Force Majeure

Notwithstanding anything in this Agreement to the contrary, the Parties shall be

excused from performing their respective obligations under this Agreement (other than the obligation to make payments with respect to performance prior to the event of Force Majeure) and shall not be liable for damages or otherwise due to their failure to perform, during any period that one Party is unable to perform due to an event of Force Majeure, provided that the Party declaring an event of Force Majeure shall: (i) act expeditiously to resume performance; (ii) exercise all commercially reasonable efforts to mitigate or limit damages to the other Party; and (iii) fulfill the requirements set forth in Article 15.2 (Notification).

15.2 Notification

A Party unable to perform under this Agreement due to an event of Force Majeure shall: (i) provide prompt written notice of such event of Force Majeure to the other Party, which shall include an estimate of the expected duration of the Party's inability to perform due to the event of Force Majeure; and (ii) provide prompt notice to the other Party when performance resumes.

ARTICLE 16: MISCELLANEOUS PROVISIONS

16.1 Notices

Unless otherwise stated herein, all notices, demands or requests required or permitted under this Agreement shall be in writing and shall be personally delivered or sent by overnight express mail or courier service. Notice may also be provided via e-mail or facsimile transmission (with the original transmitted by any of the other delivery methods specified in the previous sentence) addressed per the notification information for the DS Supplier and Company as set forth in Exhibit 2 hereto.

Such notices, demands or requests shall also be provided to such other person at

such other address as a Party may designate by like notice to the other Party. Notice received after the close of the Business Day shall be deemed received on the next Business Day.

16.2 No Prejudice of Rights

The failure of a Party to insist on any one or more instances upon strict performance of any provisions of this Agreement, or to take advantage of any of its rights hereunder, shall not be construed as a waiver of any such provisions or the relinquishment of any such right or any other right hereunder, which shall remain in full force and effect. No term or condition of this Agreement shall be deemed to have been waived and no breach excused unless such waiver or consent to excuse is in writing and signed by the Party claimed to have waived or consented to excuse.

16.3 Effect of Regulatory or Legislative Actions

- (a) The Parties agree that the Company's obligations under this Agreement are contingent on, and limited by, the Company's ability to recover all costs incurred by it under this Agreement from its retail customers in full and on a current basis. If any statutes, rules, regulations, or orders are enacted, amended, entered, or revoked which have the effect of depriving the Company's full and current recovery of said costs, the Company may terminate this Agreement upon ten (10) days written notice. The Parties agree that any such termination shall not constitute an Event of Default under this Agreement.
- (b) If any statutes, rules, regulations, or orders are enacted, amended, entered, or revoked which transfers the Company's obligation to procure or supply DS Supply to a third party(ies), this Agreement may be transferred to such

third party(ies) in accordance with the provisions of Section 16.4 below.

The Parties agree that any such transfer shall not constitute an Event of Default under this Agreement.

- (c) In the event that this Agreement is terminated as a result of any of the reasons set forth in subsections (a) and (b) of Section 16.3 above, the Parties agree that the Company shall not be liable for any costs or damages incurred or otherwise associated with (i) the transfer of the Company's obligation to obtain or provide DS Supply to third party, or (ii) the elimination of the Company's obligation to obtain or provide DS Supply from DS Supplier.

16.4 Assignment

Parties shall not assign any of their rights or obligations under this Agreement without obtaining the prior written consent of the non-assigning Party, which consent shall not be unreasonably withheld. No assignment of this Agreement shall relieve the assigning Party of any of its obligations under this Agreement until such obligations have been assumed by the assignee and all necessary consents have been obtained. Any assignment in violation of this Section 16.4 shall be void; provided, however, the Company may assign any or all of its rights and obligations under this Agreement notwithstanding anything contained herein to the contrary, without the DS Supplier's consent, to any entity succeeding to all or substantially all of the assets of the Company, or to a third party in accordance with Section 16.3(b), if such assignee agrees, in writing, to be bound by all of the terms and conditions hereof and all necessary regulatory approvals are obtained. The DS Supplier may, with prior written notice to the Company but without obtaining the approval of the Company, assign the accounts, revenues or proceeds under this Agreement to a third party. The Company agrees that, following receipt of such notice of the

assignment of accounts, revenues or proceeds and such other documentation that the Company may reasonably request, the Company will pay amounts becoming due to the assigning DS Supplier under this Agreement directly to the designated assignee; provided, however, that nothing herein shall enlarge or expand the rights of such designated assignee beyond the rights granted to the DS Supplier, and the right of such designated assignee to receive payments shall be subject to all defenses, offsets and claims of the Company arising under this Agreement.

16.5 Governing Law and Venue

To the extent not subject to the jurisdiction of the FERC, questions including those concerning the formation, validity, interpretation, execution, amendment, termination and construction of this Agreement shall be governed by the laws of the Commonwealth of Pennsylvania, without regard to principles of conflicts of law. Except for matters jurisdictional to FERC, the PUC or the appellate courts having jurisdiction over the PUC or FERC matters, all disputes hereunder shall be resolved in the Pennsylvania State court or Federal court of competent jurisdiction and within reasonably close proximity to the Company. Each Party hereby waives its respective rights to any jury trial with respect to any litigation arising under or in connection with this Agreement.

16.6 Regulatory Approvals

DS Supplier agrees to cooperate, to the fullest extent necessary, to obtain any and all required State, Federal or other regulatory approvals of the Agreement and/or Transaction Confirmations hereunder. The commencement of the Delivery Period and the obligations hereto are subject to (i) the receipt or waiver by Company of all Company required regulatory approvals, (ii) the receipt or waiver by DS Supplier of all DS Supplier

required regulatory approvals, and (iii) Pennsylvania PUC approval.

16.7 Headings

The headings and subheadings contained in this Agreement are used solely for convenience and do not constitute a part of the Agreement between the Parties hereto, nor should they be used to aid in any manner in the construction of this Agreement.

16.8 Third Party Beneficiaries

This Agreement is intended solely for the benefit of the Parties hereto and nothing in this Agreement shall be construed to create any duty or standard of care with reference to, or any liability to, any person not a Party to this Agreement.

16.9 General Miscellaneous Provisions

(a) This Agreement shall not be interpreted or construed to create an association, joint venture, or partnership between the Parties, or to impose any partnership obligation or liability upon any Party. No Party shall have any right, power, or authority to enter into any agreement or undertaking for, or on behalf of, or to act as or be an agent or representative of, or to otherwise bind, any other Party.

(b) Cancellation, expiration or Early Termination of this Agreement shall not relieve the Parties of obligations that by their nature survive such cancellation, expiration or termination, including warranties, remedies, promises of indemnity and confidentiality.

(c) Should any provision of this Agreement be held invalid or unenforceable, such provision shall be invalid or unenforceable only to the extent of such invalidity or unenforceability without invalidating or rendering unenforceable any other provision hereof unless it materially changes the agreement of the Parties; provided that in such event the Parties shall use commercially reasonable efforts to amend this Agreement or any

Transaction in order to give effect to the original intention of the Parties.

(d) Each of the Parties acknowledges that it has read this Agreement, understands it, and agrees to be bound by its terms. This Agreement is intended by the Parties as a final expression of their agreement. The Parties further agree that this Agreement is the complete and exclusive statement of agreement and supersedes all proposals (oral or written), understandings, representations, conditions, warranties, covenants and all other communications between the Parties relating thereto. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. Each Party further agrees that it will not assert, or defend itself, on the basis that any applicable tariff is inconsistent with this Agreement or any Transaction.

16.10 Taxes

As between the Parties: (i) the DS Supplier is responsible for the payment of all taxes imposed by all present and future federal, state, municipal or other taxes imposed by any taxing authority on the wholesale sales of DS Supply under this Agreement; and (ii) the Company is responsible for the payment of all taxes imposed by all present and future federal, state, municipal or other taxes imposed by any taxing authority on retail sales of DS Supply under this Agreement. Should the DS Supplier be required to remit any Pennsylvania State Sales and Use Taxes directly to the applicable taxing authority, other than taxes previously collected by the DS Supplier on behalf of the Company, the Company will defend and indemnify the DS Supplier for such Sales and Use Taxes and will pay to the DS Supplier all such tax amounts upon demand. If any Transaction is exempt from the

payment of any such taxes, the affected DS Supplier will, if requested, provide the Company with valid tax exemption certificates. Should the Company be required to remit any such taxes directly to any applicable taxing authority, other than taxes previously collected by the Company directly from the DS Supplier, the DS Supplier will defend and indemnify the Company and will pay to the Company all such tax amounts upon demand.

16.11 Audit

Each Party has the right on at least three (3) Business Days prior written notice, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made in accordance with Article 9 (Billing and Payment) and 9.1(i) (Interest on Unpaid Balances) of this Agreement.

16.12 Rules of Interpretation

The following principles shall be observed in the interpretation and construction of this Agreement:

- (a) Unless otherwise stated, the terms “include” and “including” when used in this Agreement shall be interpreted to mean by way of example only and shall not be considered limiting in any way;
- (b) All titles and headings used herein are for convenience and reference purposes only, do not constitute a part of this Agreement and shall be

ignored in construing or interpreting the obligations of the parties under this Agreement;

- (c) References to the singular include the plural and vice versa;
- (d) References to Articles, Sections, Clauses and the Preamble are, unless the context indicates otherwise, references to Articles, Sections, Clauses and the Preamble of this Agreement;
- (e) In carrying out its rights, obligations and duties under this Agreement, each Party shall have an obligation of good faith and fair dealing; and
- (f) If any payment due under this Agreement would be, by operation of the terms and conditions of any provision hereof, due and payable on a day other than a Business Day, such payment shall be made on the next following Business Day.

16.13 Confidentiality

(a) Each Party shall hold in confidence and not release or disclose any document or information furnished by the other Party in connection with this Agreement, unless: (i) compelled to disclose such document or information by judicial, regulatory or administrative process or other provisions of law; (ii) such document or information is generally available to the public; (iii) such document or information was available to the receiving Party on a non-confidential basis; (iv) such document or information was available to the receiving Party on a non-confidential basis from a third-party, provided that the receiving Party does not know, and, by reasonable effort, could not know that such

third-party is prohibited from transmitting the document or information to the receiving Party by a contractual, legal or fiduciary obligation; or (v) such disclosure is made to PJM or PaPUC and is necessary in order for the Transactions contemplated by this Agreement to be consummated or to otherwise comply with the provisions of this Agreement.

(b) Notwithstanding any other provision of this Section 16.12, a Party may disclose to its employees, representatives and agents all documents and information furnished by the other Party in connection with this Agreement, provided that such employees, representatives and agents have been advised of the confidentiality provisions of this Section 16.12, and further provided that in no event shall a document or information be disclosed in violation of the standard of conduct requirements established by FERC.

(c) A Party receiving notice or otherwise concluding that any confidential document or information furnished by the other Party in connection with this Agreement is being sought under any provision of law, to the extent it is permitted to do so under any applicable law, shall: (i) promptly notify the other Party; and (ii) use reasonable efforts in cooperation with the other Party to seek confidential treatment of such confidential information.

(d) The Parties agree that monetary damages may be inadequate to compensate a Party for the other Party's breach of its obligations under this Section 16.12. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party breaches or threatens to breach its obligations under this Article 16.12, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law.

16.14 Federal Acquisition Regulation

If any of the following clauses prescribed by the Federal Acquisition Regulation (“FAR”), 48 Code of Federal Regulations Chapter 1, should be deemed to apply to this Agreement, the DS Supplier shall comply with the requirements of such clause(s), and shall include the terms or substance of such clause(s) in its subcontracts, as and to the extent required by the FAR:

- 1) Clean Air and Water: § 52.223-2;
- 2) Contract Work Hours and Safety Standards Act-Overtime Compensation: § 52.222-4;
- 3) Equal Opportunity: § 52.222-26;
- 4) Affirmative Action for and Employment Reports on Special Disabled and Vietnam Era Veterans: § 52.222-35 and § 52.222-37;
- 5) Affirmative Action for Handicapped Workers: § 52.222-36; and
- 6) Utilization of Small Business Concerns and Small Disadvantaged Business Concerns and Small Business and Small Disadvantaged Business Subcontracting Plan: § 52.219-8 and § 52-219-9.

In case of a conflict between the provisions of the FAR and the balance of this Agreement, the requirements of the FAR shall prevail.

16.15 Binding Terms

This Agreement and the rates, terms and conditions herein shall remain in effect for the entire term hereof and each Party agrees not to seek any change to such rates, terms and conditions pursuant to the FPA, if the FPA is deemed to have jurisdiction over this Agreement, including on the grounds that they are not just and reasonable.

16.16 Amendment

This Agreement, including the appendices hereto, cannot be amended without the written agreement of all Parties prior to such amendment becoming effective. Except as provided in Appendix C, the rates, terms and conditions contained in this Agreement are not subject to change under Sections 205 or 206 of the Federal Power Act absent the mutual written agreement of the Parties. To the extent permitted by law and absent agreement to the contrary, each Party, for itself and its successors and assigns, hereby expressly and irrevocably waives its rights to argue before any governmental authority that any review, modification, or rescission of this Agreement should be considered under any standard of review other than the “public interest” standard set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956), affirmed by *Morgan Stanley Capital Group, Inc. v. Public Utility District No. 1 of Snohomish County, Washington, et al.*, 554 U.S. 527 (2008) (the “Mobile-Sierra Doctrine”).

16.17 Counterparts

This Agreement may be executed in counterparts, each of which will be considered an original, but all of which shall constitute one instrument.

16.18 Successors

This Agreement and all of the provisions hereof are binding upon, and inure to the benefit of, the Parties and their respective successors and permitted assigns.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the date first set forth above.

ATTEST:

DUQUESNE LIGHT COMPANY

Title: ~~Manager, Procurement & Settlement~~ _____

By: _____

Name: ~~C. James Davis, Jr.~~ _____

Title: _____ Director,
Rates and Energy Procurement & Federal/RTO Affairs

ATTEST:

[INSERT]

Title: _____

By: _____

Name: _____

Title: _____

APPENDIX A- MAXIMUM UNSECURED CREDIT

Credit Rating Matrix Tables for EDC's

EDC: Duquesne Light Company

Credit Rating of the DS Supplier			Maximum Credit Limit (calculated as the lesser of the percentage of TNW or the Credit Limit Cap below)	
S&P	Moody's	Fitch	Percentage of TNW	Credit Limit Cap
A- and above	A3 and above	A- and above	16%	\$60,000,000
BBB +	Baa1	BBB +	10%	\$40,000,000
BBB	Baa2	BBB	7%	\$30,000,000
BBB-	Baa3	BBB-	3%	\$20,000,000
<u>Below BBB-BB+</u>	<u>Below Baa3Ba1</u>	<u>Below BBB-BB+</u>	0%	\$0
BB	Ba2	BB	0%	\$0
BB-	Ba3	BB-	0%	\$0
Below BB-	Below Ba3	Below BB-	0%	\$0

Credit Rating Determination Methodology

The DS Supplier or its Guarantor must have a minimum senior unsecured debt rating (or, if unavailable, corporate issuer rating) equal to the Minimum Rating. If the DS Supplier or its Guarantor is rated by all three accepted rating agencies (S&P, Moody's and Fitch), and the ratings are split, the lowest rating will be used. **Minimum Rating** – The lowest credit rating for a DS Supplier, as set forth in this Appendix A, that can obtain unsecured credit.

**APPENDIX B – METHODOLOGY FOR CALCULATION OF MARK
TO MARKET (MTM) EXPOSURE**

Parameters

In calculating the MtM Exposure for each Transaction, the following parameters are set on the Transaction Date:

1. On-Peak Initial Mark Price
2. Off-Peak Initial Mark Price
3. MW-Measure
4. On-Peak Estimated Energy Quantity Per MW-Measure for each of the twelve calendar months
5. Off-Peak Estimated Energy Quantity Per MW-Measure for each of the twelve calendar months
6. Number of awarded ~~Bid Blocks~~ Tranches

In calculating the MtM Exposure for each Transaction, the following parameters are set each Business Day subsequent to the Transaction Date:

- 1) On-Peak Forward Price
- 2) Off-Peak Forward Price
- 3) Current Capacity PLC Per Bid Block
- 4) On-Peak Estimated Energy Quantity
- 5) Off-Peak Estimated Energy Quantity

Determination of On-Peak Forward Prices

On each Business Day subsequent to the Transaction date, Buyer or Broker will contact four Reference Market-Makers to obtain bid and ask Energy price quotes for AEP Dayton Hub On-Peak Hours for each month of the Delivery Period. For Buyer to include a monthly On-Peak Forward Price quote from a Reference Market-Maker, both bid and ask prices must be available. For any month for which there are no single month quotes, but for which there are two month, quarterly, or 12 month quotes available ("Aggregate Quotes"), Buyer shall disaggregate the Aggregate Quote into monthly components in the following manner. The most recently available single month quotes for the same calendar months contained in the Aggregate Quote shall be averaged. The percentage by which each single month price differs from average of the single month prices for the same time period of the Aggregate Quote will be applied to the Aggregate Quote to establish monthly prices for the like month of the Aggregate Quote, such that the average will be Aggregate Quote. In the event that quotes for one or more months of a multi-month block and for the entire multi-month block in aggregate are both available, but are inconsistent with each other, Buyer will use the one that is most consistent with other available quotes.

Quotes from the Reference Market-Makers will be examined to identify quotes that are out of line and potentially invalid or are in obvious error. Reference Market-Makers will be asked to either correct or verify data that is anomalous and/or inconsistent with that provided by other sources or is in obvious error. If the data cannot be verified in time for the daily mark, the anomalous data will be discarded.

To the extent that On-Peak Forward Price quotes are not available for a given month on a given Business Day, either as single month price quotes or as an Aggregate Quote, Buyer shall establish the On-Peak Forward Price for that month using a methodology that utilizes the best information available to Buyer at that time. For example, the On-Peak Forward Price for the given month may be updated based on the changes in On-Peak Forward Price quotes for different months provided by Reference Market-Makers between the prior Business Day and the current Business Day.

Determination of Off-Peak Forward Prices

On each Business Day subsequent to the Transaction date, Buyer or Broker will contact four Reference Market-Makers to obtain bid and ask Energy price quotes for AEP Dayton Hub Off-Peak Hours for each month of the Delivery Period. For Buyer to include a monthly Off-Peak Forward Price quote from a Reference Market-Maker, both bid and ask prices must be available. For any month for which there are no single month quotes, but for which there are two month, quarterly, or 12 month quotes available (“Aggregate Quotes”), Buyer shall disaggregate the Aggregate Quote into monthly components in the following manner. The most recently available single month quotes for the same calendar months contained in the Aggregate Quote shall be averaged. The percentage by which each single month price differs from the average of the single month prices for the same time period of the Aggregate Quote will be applied to the Aggregate Quote to establish monthly prices for the like month of the Aggregate Quote, such that the average will be Aggregate Quote. In the event that quotes for one or more months of a multi-month block and for the entire multi-month block in aggregate are both available, but are inconsistent with each other, Buyer will use the one that is most consistent with other available quotes. Quotes from the Reference Market-Makers will be examined to identify quotes that are out of line and potentially invalid or are in obvious error. Reference Market-Makers will be asked to either correct or verify data that is anomalous and/or inconsistent with that provided by other sources or is in obvious error. If the data cannot be verified in time for the daily mark, the anomalous data will be discarded.

To the extent that Off-Peak Forward Price quotes are not available for a given month on a given Business Day, either as single month price quotes or as an Aggregate Quote, Buyer shall establish the Off-Peak Forward Price for that month using a methodology that utilizes the best information available to Buyer at that time. For example, the Off-Peak Forward Price for the given month may be updated based on the changes in Off-Peak Forward Price

quotes for different months provided by Reference Market-Makers between the prior Business Day and the current Business Day.

Example of Disaggregating Aggregate Quotes

The following is an example of the process to be used for disaggregating Aggregate Quotes:

- a. Aggregate Quote only available for January – March: \$60/MWh.
- b. Immediate Prior Calendar year quotes for January, February, and March as follows:

January: \$42/MWh
February: \$45/MWh
March: \$40/MWh

- c. Calculations as follows:
 - 1. Calculate Average price in (b) = \$42.33/MWh
 - 2. Calculate monthly deviation from Average:
 - January: 99.2% ($\$42/\42.33)
 - February: 106.3% ($\$45/\42.33)
 - March: 94.5% ($\$40/\42.33)
 - 3. Disaggregate the Aggregate Quote by applying percentages from c.(2) to the available aggregate quote:
 - January: \$59.53 ($\$60 \times 99.2\%$)
 - February: \$63.78 ($\$60 \times 106.3\%$)
 - March: \$56.69 ($\$60 \times 94.5\%$)

Mark-To-Market Example

Necessary Information from a Transaction Confirmation:		
Delivery Period:	June 1, 2011 - May 31, 2012	
Bid Blocks:	3 (j)	
Estimated Energy Quantity Per MW-Measure:		
	On-Peak MWh (k)	Off-Peak MWh (l)
Jan	11800	8300
Feb	13000	9100
Mar	9100	6400
Apr	7200	5000
May	8800	6200
Jun	12900	9000
Jul	15200	10600
Aug	16000	11200
Sep	9500	6700
Oct	8300	5800
Nov	9800	6900
Dec	10900	7600

Business Day on which MiM is Calculated:	June 24, 2011
MW-Measure:	50.0 MW (m)
Current Capacity PLC Per Bid Block:	40.0 MW (n)
Percent of On-Peak Hours Remaining in Current Month:	18.2% (o)
Percent of Off-Peak Hours Remaining in Current Month:	21.7% (p)

MiM Exposure Calculation									
	a	b	c	d	e=c-a	f=d-b	g=k*n/m*j*o	h=l*n/m*j*p	i=(e*g)+(f*h)
	On-Peak Initial Mark Price \$/MWh	Off-Peak Initial Mark Price \$/MWh	On-Peak Forward Price \$/MWh	Off-Peak Forward Price \$/MWh	Change In On-Peak Price \$/MWh	Change In Off-Peak Price \$/MWh	On-Peak Estimated Energy Quantity MWh	Off-Peak Estimated Energy Quantity MWh	MiM Exposure
Jun-11	57.04	27.95	58.48	28.65	1.44	0.70	5,629	4,696	\$ 11,393
Jul-11	72.81	31.31	75.26	32.36	2.45	1.05	36,480	25,440	\$ 116,088
Aug-11	72.81	34.23	74.28	34.91	1.47	0.68	38,400	26,880	\$ 74,726
Sep-11	45.56	24.15	47.31	25.08	1.75	0.93	22,800	16,080	\$ 54,854
Oct-11	43.23	23.34	46.09	24.89	2.86	1.55	19,920	13,920	\$ 78,547
Nov-11	43.23	25.50	46.40	27.38	3.17	1.88	23,520	16,560	\$ 105,691
Dec-11	43.23	26.36	44.86	27.36	1.63	1.00	26,160	18,240	\$ 60,881
Jan-12	50.73	38.55	54.45	41.39	3.72	2.84	28,320	19,920	\$ 161,923
Feb-12	50.73	39.06	53.61	41.29	2.88	2.23	31,200	21,840	\$ 138,559
Mar-12	45.23	30.75	47.64	32.39	2.41	1.64	21,840	15,360	\$ 77,825
Apr-12	45.23	25.78	48.01	27.36	2.78	1.58	17,280	12,000	\$ 66,998
May-12	47.06	24.94	49.06	26.00	2.00	1.06	21,120	14,880	\$ 58,013
									\$ 1,005,499

CALCULATION OF MTM EXPOSURE FOR HOURLY PRICE TRANSACTIONS

The MtM Exposure for an Hourly Price Transaction shall be calculated as follows. During the first month of the term of a Transaction, the MtM Exposure shall be equal to Two Hundred Fifty Thousand Dollars (US\$250,000.00) per Tranche. Thereafter, the MtM Exposure shall be calculated on the first Business Day of each month during the term of a Transaction and shall be deemed equal to the product of: (i) Two Hundred Fifty Thousand Dollars (US\$250,000.00) per Tranche; (ii) the ratio of the Current Capacity PLC Per Tranche to the MW-Measure; (iii) the number of Tranches awarded to the DS Supplier per the Transaction Confirmation; and (iv) the ratio of the calendar days remaining in the Delivery Period to the total calendar days in the Delivery Period. The following definitions shall apply for the purposes of this calculation:

“Capacity Peak Load Contribution” or “Capacity PLC” means the aggregation of retail customer peak load contributions, as determined by the Buyer in accordance with the PJM Agreements and reported by Buyer to PJM pursuant to Buyer’s retail load settlement process, and used by PJM in determining the DS Supplier’s capacity obligation for each Transaction.

“Current Capacity PLC Per Tranche” is the Capacity PLC of a Tranche as of the Business Day the MtM Exposure is calculated for the Transaction.

“MW-Measure” means the Current Capacity PLC Per Tranche as of the Transaction Date.

APPENDIX C - DS SUPPLY SPECIFICATIONS

a. ~~With respect to a Transaction, DS Supplier shall provide DS Supply on a firm and continuous basis. The terms of the Transaction shall be set forth in a Transaction Confirmation to this SMA, in a form as set forth in Exhibit I. As used herein and in the Transaction Confirmation, the following DS Supply specifications will be specified in Transaction Confirmations to this Supplier Master Agreement (SMA).~~

~~1) _____~~

~~2) **Product:**~~

~~3) Full Requirements Service shall mean, meaning all of the following necessary services or products that are required to supply the DS Responsibility Share for the DS Customers associated with the Transaction Confirmation, including:~~

~~1) Energy, Capacity, transmission (except for Network Integration Transmission Service), Ancillary Services, Alternative Energy Credits for compliance with the AEPS Act, transmission and distribution system losses, congestion management costs, and such other products and services that are required except for distribution service.~~

~~2) The Transaction Confirmation shall, *inter alia*, specify the following terms with respect to a Transaction: (i) the Product (typically, Full Requirements Service); (ii) the DS Customer group associated with the applicable DS Load; (iii) the Delivery Point at which the DS Supplier shall deliver the DS Supply; (iv) the Delivery Period during which the DS Supplier shall deliver the DS Supply; (v) the number of Tranches; (vi) the DS Supplier Responsibility Share; (vii) for Fixed Price Transactions, the total number of AECs associated with each Tranche; and (viii) the DS Fixed Price or Fixed Price Adder, as applicable, for each Tranche.~~

4) ~~—~~ The Company and DS Supplier shall be responsible for their respective PJM Billing Statement Line Item Credits and Charges associated with a Transaction as described in Appendix D, Responsibilities for PJM Billing Line Items as Defined in Applicable PJM Agreement or Manual. Company and DS Supplier agree to communicate with PJM as may be necessary to ensure that PJM transfers all PJM Billing Statement Line Item Credits and Charges to the appropriate party.

5) ~~—~~

3) ~~Appendix D describes Company and DS Supplier Responsibilities for PJM Billing Statement Line Item Credits and Charges associated with the Product.~~

4) ~~The DS Supplier shall comply with all applicable requirements described in Appendix E, DS Suppliers' Obligations For AEPS Compliance, associated with the AEPS Act as described in this Supplier Master Agreement and in Appendix E.~~

5) ~~Except as provided in Paragraph 1 above, DS Supplier bears the risk of any other changes in PJM products and pricing during the term of all Transactions under this Agreement. However, if there are any other new FERC-approved PJM transmission charges other than those referred to in Paragraph 1 above or other new PJM charges and costs, charged to network transmission customers, that DS Supplier believes the Company should recover through retail rates because they are directly related to the Company's obligations, then Company may file with the PaPUC a request for approval to recover such new costs. DS Supplier is required to intervene in any such proceeding before the PaPUC. Such new costs can only be charged to the Company to the extent that the PaPUC approves the Company's recovery of those costs. DS Supplier agrees to be bound by the decision of the PaPUC (subject to the normal rules for appeal of the~~

decision of the PaPUC) and waives all claims concerning this issue before the FERC.

Notwithstanding the foregoing, nothing in the Agreement shall preclude DS Supplier or Company from taking any position before the FERC regarding the creation and allocation of any such PJM charges.

6) — The Transaction Confirmation shall, *inter alia*, specify the following terms with respect to a Transaction: (i) the Product; (ii) the DS Customer group associated with the applicable DS Load; (iii) the Delivery Point at which the DS Supplier shall deliver the DS Supply; (iv) the Delivery Period during which the DS Supplier shall deliver the DS Supply; (v) the number of Tranches; (vi) the DS Supplier Responsibility Share; (vii) the total number of AECs associated with the Transaction

Appendix E further describes DS Supplier responsibilities for compliance with the AEPS Act in the product specification.

DS Customer Group:

Each Transaction Confirmation shall be associated with DS Supply to one of the following

DS Customer categories, or their successors, as defined in the DS Tariff:

<u>Customer Group</u>	<u>Rate Schedule</u>	<u>Description</u>
<u>Residential & Lighting</u>	<u>RS</u>	<u>Residential Service</u>
	<u>RH</u>	<u>Residential Service Heating</u>
	<u>RA</u>	<u>Residential Service Add-On Heat Pump</u>
	<u>AL</u>	<u>Architectural Lighting Service</u>
	<u>SE</u>	<u>Street Lighting Energy</u>
	<u>SM</u>	<u>Street Lighting Municipal</u>
	<u>SH</u>	<u>Street Lighting Highway</u>
<u>Small Commercial & Industrial</u>	<u>PAL</u>	<u>Private Area Lighting</u>
	<u>GS</u>	<u>General Service Small</u>
	<u>GM < 25kW</u>	<u>General Service Medium – Demand less than 25kW</u>
	<u>GMH < 25kW</u>	<u>General Service Medium Heating – Demand less than 25kW</u>
<u>Medium Commercial & Industrial</u>	<u>UMS</u>	<u>Unmetered Service</u>
	<u>GM ≥ 25kW and < 200kW</u>	<u>General Service Medium – Demand equal to or greater than 25kW and less than 200kW</u>
	<u>GMH ≥ 25kW and < 200kW</u>	<u>General Service Medium Heating – Demand equal to or greater than 25kW and less than 200kW</u>
<u>Large Commercial & Industrial HPS-Eligible</u>	<u>GM ≥ 200kW</u>	<u>General Service Medium – Demand equal to or greater than 200kW</u>
	<u>GMH ≥ 200kW</u>	<u>General Service Medium – Demand equal to or greater than 200kW</u>
	<u>GL</u>	<u>General Service Large</u>
	<u>GLH</u>	<u>General Service Heating</u>
	<u>L</u>	<u>Large Power Service</u>
	<u>HVPS</u>	<u>High Voltage Power Service</u>

Residential & Lighting;

Small Commercial and Industrial (annual peak demands less than 25kW);

~~Medium Commercial and Industrial (annual peak demands greater than or equal to 25kW and less than 2300kW);~~

~~Large Commercial and Industrial (annual peak demands greater than or equal to 2300kW)~~

~~**Service Type:**~~

~~Residential & Lighting : RA, RS, RH, AL, SE, SM, SH, PAL~~

~~Small Commercial and Industrial : GS, GM < 25 kW, GMH < 25 kW, MTS/UMS, UMS~~

~~Medium Commercial and Industrial : GM > 25 kW, GMH > 25 kW~~

~~Large Commercial and Industrial : GL, GLH, L, HVPS~~

~~**Delivery Point:**~~

~~Duquesne Residual Aggregate Zone in PJM Pnode 116472943~~

~~**Delivery Period:**~~

~~Will be specified in Transaction Confirmations to this SMA.~~

~~**Number of Tranches and Percentage for Each Tranche:**~~

~~Will be specified in Transaction Confirmations to this SMA.~~

~~**DS Supplier Responsibility Share:**~~

~~Fixed percentage share of DS Load for DS Customer Group associated with Transaction Confirmation. Typically, number of tranches won x Tranches Percentage for the DS Customer Group. Will be specified in Transaction Confirmations to this SMA.~~

~~**Seasonal Billing Factor:**~~

~~None used.~~

APPENDIX D – RESPONSIBILITIES FOR PJM BILLING LINE ITEMS AS DEFINED IN APPLICABLE PJM AGREEMENT OR MANUAL

ID #	PJM Billing Statement Line Items	Responsible Party	
		EDC	DS Supplier
ID#	CHARGES		
1000	Amount Due for Interest on Past Charges		DS Supplier
1100	Network Integration Transmission Service	EDC	
1101	Network Integration Transmission Service (ATSI Low Voltage)	EDC	
1102	Network Integration Transmission Service (exempt)	EDC	
<u>1103</u>	<u>Underground Transmission Service</u>	<u>EDC</u>	
1104	Network Integration Transmission Service Offset	EDC	
1108	Transmission Enhancement	EDC	
1109	MTEP Project Cost Recovery		DS Supplier
1110	Direct Assignment Facilities		DS Supplier
<u>1115</u>	<u>Transmission Enhancement Settlement (EL05-121-009)</u>	<u>EDC</u>	
1120	Other Supporting Facilities		DS Supplier
1130	Firm Point-to-Point Transmission Service		DS Supplier
1133	Firm Point-to-Point Transmission Service Resale Charge		DS Supplier
1135	Neptune Voluntary Released Transmission Service (Firm)		DS Supplier

1136	Hudson Voluntary Released Transmission Service (Firm)		DS Supplier
1138	Linden Voluntary Released Transmission Service (Firm)		DS Supplier
1140	Non-Firm Point-to-Point Transmission Service		DS Supplier
1143	Non-Firm Point-to-Point Transmission Service Resale Charge		DS Supplier
1145	Neptune Voluntary Released Transmission Service (Non-Firm)		DS Supplier
1146	Neptune Default Released Transmission Service (Non-Firm)		DS Supplier
1147	Neptune Unscheduled Usage Billing Allocation		DS Supplier
1155	Linden Voluntary Released Transmission Service (Non-Firm)		DS Supplier
1156	Linden Default Released Transmission Service (Non-Firm)		DS Supplier
1157	Linden Unscheduled Usage Billing Allocation		DS Supplier
1165	Hudson Voluntary Released Transmission Service (Non-Firm)		DS Supplier
1166	Hudson Default Released Transmission Service (Non-Firm)		DS Supplier
1167	Hudson Unscheduled Usage Billing Allocation		DS Supplier
1200	Day-ahead Spot Market Energy		DS Supplier
1205	Balancing Spot Market Energy		DS Supplier
1210	Day-ahead Transmission Congestion		DS Supplier
1215	Balancing Transmission Congestion		DS Supplier
1216	<u>Pseudo-Tie Balancing Congestion Refund</u>		<u>DS Supplier</u>
1218	Planning Period Congestion Uplift		DS Supplier
1220	Day-ahead Transmission Losses		DS Supplier
1225	Balancing Transmission Losses		DS Supplier
1230	Inadvertent Interchange		DS Supplier
1240	Day-ahead Economic Load Response		DS Supplier

Exhibit JP-3

1241	Real-time Economic Load Response		DS Supplier
1242	Day-ahead Load Response Charge Allocation		DS Supplier
1243	Real-time Load Response Charge Allocation		DS Supplier
1245	Emergency Load Response		DS Supplier
1250	Meter Error Correction		DS Supplier
1260	Emergency Energy		DS Supplier
1301	PJM Scheduling, System Control and Dispatch Service – Control Area Administration		DS Supplier
1302	PJM Scheduling, System Control and Dispatch Service – FTR Administration		DS Supplier
1303	PJM Scheduling, System Control and Dispatch Service –Market Support		DS Supplier
1304	PJM Scheduling, System Control and Dispatch Service – Regulation Market Administration		DS Supplier
1305	PJM Scheduling, System Control and Dispatch Service – Capacity Resource/Obligation Mgmt.		DS Supplier
1306	PJM Scheduling, System Control and Dispatch Service – Advanced Second Control Center		DS Supplier
1307	PJM Scheduling, System Control and Dispatch Service – Market Support Offset		DS Supplier
1308	PJM Scheduling, System Control and Dispatch Service Refund – Control Area Administration		DS Supplier
1309	PJM Scheduling, System Control and Dispatch Service Refund – FTR Administration		DS Supplier
1310	PJM Scheduling, System Control and Dispatch Service Refund – Market Support		DS Supplier
1311	PJM Scheduling, System Control and Dispatch Service Refund –Regulation Market Administration		DS Supplier
1312	PJM Scheduling, System Control and Dispatch Service Refund – Capacity Resource/Obligation Mgmt.		DS Supplier
1313	PJM Settlement, Inc.		DS Supplier

1314	Market Monitoring Unit (MMU) Funding		DS Supplier
1315	FERC Annual Charge Recovery		DS Supplier
1316	Organization of PJM States, Inc. (OPSI) Funding		DS Supplier
1317	North American Electric Reliability Corporation (NERC)		DS Supplier
1318	Reliability First Corporation (RFC)		DS Supplier
1320	Transmission Owner Scheduling, System Control and Dispatch Service		DS Supplier
1330	Reactive Supply and Voltage Control from Generation and Other Sources Service		DS Supplier
1340	Regulation and Frequency Response Service		DS Supplier
1350	Energy Imbalance Service		DS Supplier
1360	Synchronized Reserve		DS Supplier
1362	Non-Synchronized Reserve		DS Supplier
1365	Day-ahead Scheduling Reserve		DS Supplier
1370	Day-ahead Operating Reserve		DS Supplier
1371	Day-ahead Operating Reserve for Load Response		DS Supplier
1375	Balancing Operating Reserve		DS Supplier
1376	Balancing Operating Reserve for Load Response		DS Supplier
1377	Synchronous Condensing		DS Supplier
1378	Reactive Services		DS Supplier
1380	Black Start Service		DS Supplier
<u>1390</u>	<u>Fuel Cost Policy Penalty</u>		<u>DS Supplier</u>
1400	Load Reconciliation for Spot Market Energy		DS Supplier
1410	Load Reconciliation for Transmission Congestion		DS Supplier
1420	Load Reconciliation for Transmission Losses		DS Supplier

1430	Load Reconciliation for Inadvertent Interchange		DS Supplier
1440	Load Reconciliation for PJM Scheduling, System Control and Dispatch Service		DS Supplier
1441	Load Reconciliation for PJM Scheduling, System Control and Dispatch Service Refund		DS Supplier
1442	Load Reconciliation for Schedule 9-6 – Advanced Second Control Center		DS Supplier
1444	Load Reconciliation for Market Monitoring Unit Funding		DS Supplier
1445	Load Reconciliation for FERC Annual Charge Recovery		DS Supplier
1446	Load Reconciliation for Organization of PJM States, Inc. (OPSI) Funding		DS Supplier
1447	Load Reconciliation for North American Electric Reliability Corporation (NERC)		DS Supplier
1448	Load Reconciliation for Reliability First Corporation (RFC)		DS Supplier
<u>1449</u>	<u>Load Reconciliation for Consumer Advocates of PJM States, Inc. (CAPS) Funding</u>		<u>DS Supplier</u>
1450	Load Reconciliation for Transmission Owner Scheduling, System Control and Dispatch Service		DS Supplier
1460	Load Reconciliation for Regulation and Frequency Response Service		DS Supplier
1470	Load Reconciliation for Synchronized Reserve		DS Supplier
1472	Load Reconciliation for Non-Synchronized Reserve		DS Supplier
1475	DASR Load Reconciliation		DS Supplier
1478	Load Reconciliation for Operating Reserve		DS Supplier
1480	Load Reconciliation for Synchronous Condensing		DS Supplier
1490	Load Reconciliation for Reactive Services		DS Supplier
1500	Financial Transmission Rights Auction		DS Supplier
1600	RPM Auction		DS Supplier
1610	Locational Reliability		DS Supplier

Exhibit JP-3

1611	CP Transitional Locational Reliability		DS Supplier
1650	Non-Unit Specific Capacity Transaction		DS Supplier
1660	Demand Resource and ILR Compliance Penalty		DS Supplier
1661	Capacity Resource Deficiency		DS Supplier
1662	Generation Resource Rating Test Failure		DS Supplier
1663	Qualifying Transmission Upgrade Compliance Penalty		DS Supplier
1664	Peak Season Maintenance Compliance Penalty		DS Supplier
1665	Peak-Hour Period Availability		DS Supplier
1666	Load Management Test Failure		DS Supplier
1670	FRR LSE Reliability		DS Supplier
1680	FRR LSE Demand Resource And Ilr Compliance Penalty		DS Supplier
1681	FRR LSE Capacity Resource Deficiency		DS Supplier
1682	FRR LSE Generation Resource Rating Test Failure		DS Supplier
1683	FRR LSE Qualifying Transmission Upgrade Compliance Penalty		DS Supplier
1684	FRR LSE Peak Season Maintenance Compliance Penalty		DS Supplier
1685	FRR LSE Peak-Hour Period Availability		DS Supplier
1686	FRR LSE Load Management Test Failure		DS Supplier
1687	FRR LSE Schedule 9-5		DS Supplier
1688	FRR LSE Schedule 9-6		DS Supplier
1710	PJM/MISO Seams Elimination Cost Assignment		DS Supplier
1712	Intra-PJM Seams Elimination Cost Assignment		DS Supplier
1720	RTO Start-up Cost Recovery		DS Supplier
1730	Expansion Cost Recovery	EDC	

1900	Unscheduled Transmission Service		DS Supplier
1910	Ramapo Phase Angle Regulators		DS Supplier
1911	Michigan – Ontario Interface Phase Angle Regulators		DS Supplier
1920	Station Power		DS Supplier
1930	Generation Deactivation	EDC	
1932	Generation Deactivation Refund	EDC	
1950	Virginia Retail Administrative Fee		DS Supplier
1952	Deferred Tax Adjustment	EDC	
1955	Deferral Recovery		DS Supplier
1980	Miscellaneous Bilateral		DS Supplier
1995	PJM Annual Membership Fee		DS Supplier
1999	PJM Customer Payment Default		DS Supplier
ID#	CREDITS		
2100	Network Integration Transmission Service	EDC	
2101	Network Integration Transmission Service (ATSI Low Voltage)	EDC	
2102	Network Integration Transmission Service (exempt)	EDC	
<u>2103</u>	<u>Underground Transmission Service</u>	<u>EDC</u>	
2104	Network Integration Transmission Service Offset	EDC	
2106	Non-Zone Network Integration Transmission Service	EDC	
2108	Transmission Enhancement	EDC	
2109	MTEP Project Cost Recovery		DS Supplier
2110	Direct Assignment Facilities		DS Supplier
2120	Other Supporting Facilities		DS Supplier

Exhibit JP-3

2130	Firm Point-to-Point Transmission Service		DS Supplier
2132	Internal Firm Point-to-Point Transmission Service		DS Supplier
2133	Firm Point-to-Point Transmission Service Resale Credit		DS Supplier
2135	Neptune Voluntary Released Transmission Service (Firm)		DS Supplier
2136	Hudson Voluntary Released Transmission Service (Firm)		DS Supplier
2138	Linden Voluntary Released Transmission Service (Firm)		DS Supplier
2140	Non-Firm Point-to-Point Transmission Service		DS Supplier
2142	Internal Non-Firm Point-to-Point Transmission Service		DS Supplier
2143	Non-Firm Point-to-Point Transmission Service Resale Credit		DS Supplier
2145	Neptune Voluntary Released Transmission Service (Non-Firm)		DS Supplier
2146	Neptune Default Released Transmission Service (Non-Firm)		DS Supplier
2155	Linden Voluntary Released Transmission Service (Non-Firm)		DS Supplier
2156	Linden Default Released Transmission Service (Non-Firm)		DS Supplier
2165	Hudson Voluntary Released Transmission Service (Non-Firm)		DS Supplier
2166	Hudson Default Released Transmission Service (Non-Firm)		DS Supplier
2210	Transmission Congestion		DS Supplier
<u>2211</u>	<u>Day-ahead Transmission Congestion</u>		<u>DS Supplier</u>
<u>2215</u>	<u>Balancing Transmission Congestion</u>		<u>DS Supplier</u>
2217	Planning Period Excess Congestion		DS Supplier
2218	Planning Period Congestion Uplift		DS Supplier
2220	Transmission Losses		DS Supplier
2240	Day-ahead Economic Load Response		DS Supplier
2241	Real-time Economic Load Response		DS Supplier

Exhibit JP-3

2245	Emergency Load Response		DS Supplier
2260	Emergency Energy		DS Supplier
2320	Transmission Owner Scheduling, System Control and Dispatch Service		DS Supplier
2330	Reactive Supply and Voltage Control from Generation and Other Sources Service		DS Supplier
2340	Regulation and Frequency Response Service		DS Supplier
2350	Energy Imbalance Service		DS Supplier
2360	Synchronized Reserve		DS Supplier
2362	Non-Synchronized Reserve		DS Supplier
2365	Day-ahead Scheduling Reserve		DS Supplier
2370	Day-ahead Operating Reserve		DS Supplier
2371	Day-ahead Operating Reserve for Load Response		DS Supplier
2375	Balancing Operating Reserve		DS Supplier
2376	Balancing Operating Reserve for Load Response		DS Supplier
2377	Synchronous Condensing		DS Supplier
2378	Reactive Services		DS Supplier
2380	Black Start Service		DS Supplier
<u>2415</u>	<u>Balancing Transmission Congestion Load Reconciliation</u>		<u>DS Supplier</u>
2420	Load Reconciliation for Transmission Losses		DS Supplier
2500	Financial Transmission Rights Auction		DS Supplier
2510	Auction Revenue Rights		DS Supplier
2600	RPM Auction		DS Supplier
2620	Interruptible Load for Reliability		DS Supplier
2630	Capacity Transfer Rights		DS Supplier

Exhibit JP-3

2640	Incremental Capacity Transfer Rights		DS Supplier
2650	Non-Unit Specific Capacity Transaction		DS Supplier
2660	Demand Resource and ILR Compliance Penalty		DS Supplier
2661	Capacity Deficiency Resource		DS Supplier
2662	Generation Resource Rating Test Failure		DS Supplier
2663	Qualifying Transmission Upgrade Compliance Penalty		DS Supplier
2664	Peak Season Maintenance Compliance Penalty		DS Supplier
2665	Peak-Hour Period Availability		DS Supplier
2666	Load Management Test Failure		DS Supplier
2670	FRR LSE Reliability Credit		DS Supplier
2680	FRR LSE Demand Resource And Ilr Compliance Penalty		DS Supplier
2681	FRR LSE Capacity Resource Deficiency		DS Supplier
2682	FRR LSE Generation Resource Rating Test Failure		DS Supplier
2683	FRR LSE Qualifying Transmission Upgrade Compliance Penalty		DS Supplier
2684	FRR LSE Peak Season Maintenance Compliance Penalty		DS Supplier
2685	FRR LSE Peak-Hour Period Availability		DS Supplier
2686	FRR LSE Load Management Test Failure		DS Supplier
2687	FRR LSE Schedule 9-5		DS Supplier
2688	FRR LSE Schedule 9-6		DS Supplier
2710	PJM/MISO Seams Elimination Cost Assignment		DS Supplier
2712	Intra-PJM Seams Elimination Cost Assignment		DS Supplier
2720	RTO Start-up Cost Recovery		DS Supplier
2730	Expansion Cost Recovery	EDC	

Exhibit JP-3

2910	Ramapo Phase Angle Regulators		DS Supplier
2912	CT Lost Opportunity Cost Allocation		DS Supplier
2930	Generation Deactivation	EDC	
2932	Generation Deactivation Refund	EDC	
2950	Virginia Retail Administrative Fee		DS Supplier
2952	Deferred Tax Adjustment	EDC	
2955	Deferral Recovery		DS Supplier
2980	Miscellaneous Bilateral		DS Supplier
2996	Annual PJM Cell Tower		DS Supplier
2997	Annual PJM Building Rent		DS Supplier

APPENDIX E – DS SUPPLIER’S OBLIGATIONS FOR AEPS COMPLIANCE

~~To satisfy AEPS w~~With respect to the DS Supplier’s Responsibility Share, DS Supplier shall fulfill the following obligations:

~~(1) Providing~~ Provide sufficient AECs for each ~~Tranche~~, in accordance with the schedule provided below ~~awarded via the DS Solicitation~~. It is DS Supplier’s obligation to supply actual AECs. Failure to do so may in the discretion of Company constitute an Event of Default under this Agreement.

~~(2) Provide actual AECs that conform to all applicable PaPUC or other legal requirements in effect as of the date that the AECs are provided to the Company. If such requirements change by law or any other reason, DS Supplier shall be responsible for any incremental costs associated with ensuring that the AECs it provides to the Company conform to such requirements then in effect.~~

Provide

~~(1)(3)~~ AECs shall be provided on a six (6) month basis or at the end of any Delivery Period, if the Delivery Period is less than six (6) months, and shall be transferred to the Company within 30 days from the final day of any such six month period or Delivery Period; provided; however, that if the term of any Delivery Period includes two different AEPS reporting years, then DS Supplier shall provide the AECs required for the first AEPS reporting year by June 30th of each year.

~~(2)(4)~~ Paying any AEPS penalties, costs, charges, ~~etc.~~ damages, or other fees assessed against the DS Supplier and/or the Company associated with the DS Supplier’s non-performance with this Agreement or any other applicable requirements related to AEPS requirements.

~~(3)(5)~~ Submitting to the Company proof of ~~AEPS~~-compliance under this Agreement in such form and manner as may be required by the Company.

~~(4)(6)~~ Provide to the Company all information the Company may require to comply with the AEPS Act and its implementing regulations and other ~~r~~Requirements of ~~I~~Law, including, but not limited to the price paid per AEC required by 73 Pa. C.S. § 1648.3(e)(8).

This Appendix E shall confirm the Alternative Energy Portfolio Standards Obligation of the Transaction agreed to on [Month, Day, Year] ("Bid Proposal Due Date").

With respect to Transactions for Full Requirements Service, the DS Supplier shall deliver AECs conforming to all applicable requirements ~~Alternative Energy Portfolio Standards Obligations~~ for the period beginning [Month, Day, Year] based on a percentage of the total MWh supplied by DS Supplier, in accordance with the following schedule:

<u>Compliance Period</u>	<u>Tier 1</u>	<u>PV</u>	<u>Tier 2</u>
6/1/2017 – 5/31/2018	6.5%	0.3400%	8.2%
6/1/2018 – 5/31/2019	7.0%	0.3900%	8.2%
6/1/2019 – 5/31/2020	7.5%	0.4433%	8.2%
6/1/2021 – 5/31/2022	8.07.5%	0.05000%	—
—	—10.0%		

The percentages set forth above are those applicable for the first ~~DS RFP~~-auction in DSP IX and may be revised for future ~~RFPs~~-~~DS Auctions~~ to reflect changes in law or other applicable ~~regulatory~~-requirements. Unless the PaPUC or other authority with jurisdiction implements ~~re~~ ~~are~~ changes related to ~~to~~ ~~PA~~-AEPS, compliance obligations for periods beyond 6/1/2021 to 5/31/2022, obligations will remain at the 6/1/2021 to 5/31/2022 percentages. These are subject to revision if there are changes from the Pennsylvania AEPS Administrator.

For each compliance period during the Delivery Period, the number of AECs that a DS Supplier is obligated to provide may be reduced by a pre-determined number of AECs allocated to the

DS Supplier ("Allocated AECs"). The number of Allocated AECs will be defined prior to the Transaction Date. Any Allocated AECs will not be transferred to the DS Supplier; but instead, the DS Supplier's AEPSC obligations will be reduced by a pro rata share of the Allocated AECs, will be credited to that DS Supplier's AEPSC obligation and the Allocated AECs will remain the property of the Company.

The above amounts are estimates and will vary based on actual load served. DS Supplier will need to true-up, higher or lower, actual credits needed based on Monthly Settlement Amount final reconciled settlement data from PJM.

DS Supplier shall be responsible to deliver AECs that conform to all applicable PaPUC or other legal requirements in effect as of the date that the AECs are provided to the Company. If Alternative Energy Portfolio Requirements such requirements change by law or any other reason, DS Supplier shall be responsible for any incremental costs associated with ensuring that the AECs it provides to the Company conform to such requirements then in effect providing the credits at its expense in order to comply with its obligations under Full Requirements Service.

EXHIBIT 1

TRANSACTION CONFIRMATION FOR FIXED PRICE TRANSACTIONS

This Transaction Confirmation letter is being provided pursuant to and in accordance with the Agreement dated [Month, Day, Year] (**Date of the Contract/RFP/DS Auction**) between Duquesne Light Company ("Company") and [INSERT] ("DS Supplier"). Terms used but not defined herein shall have the meanings ascribed to them in the Agreement. This Transaction Confirmation shall confirm the following terms of the Transaction agreed to on [Month, Day, Year] (**Date of the current RFP/DS Auction for the tranches the won and will be serving**) ("Transaction Date").

Product: Full Requirements Service

DS Customer Group: [INSERT CUSTOMER CLASS]

Delivery Point: Duquesne Residual Aggregate Zone in PJM Pnode 116472943

Delivery Period: [Month, Day, Year] through [Month, Day, Year]

Number of Tranches: [INSERT]

DS Fixed Percentage: [INSERT] % of DEFAULT SERVICE Load (for applicable customer class)

DS Fixed Price: [INSERT AVERAGE PRICE] per MWh

Tranche 1 at [INSERT] per MWH

Tranche 2 at [INSERT] per MWH

Tranche 3 at [INSERT] per MWH

:

Tranche [X] at [INSERT] per MWH

Alternative Energy Credit (AEC) Allocation (if any):

Alternative Energy Portfolio Standards - Reporting Period	AEC Allocation per Tranche, (AECs)	Total AEC Allocation (AECs)
201217-2218		
202218-2319		
2019-20		
2020-21		

Please confirm that the terms stated herein accurately reflect the agreement reached on the date above between DS Supplier and Company by returning an executed copy of this Transaction Confirmation by email to the Company at jjenkins@duqlight.com or energysupply@duqlight.com. The signatories to this Transaction must have the authority to enter into this Transaction.

Duquesne Light Company _____ [INSERT]

By: _____ By: _____

Name: _____ C. James Davis, Jr. _____ Name: _____

Title: _____ Director, Rates and Energy Procurement _____ Title: _____

| *& Federal/RTO Affairs*

TRANSACTION CONFIRMATION FOR HOURLY PRICE TRANSACTIONS

This Transaction Confirmation letter is being provided pursuant to and in accordance with the Agreement dated [Month, Day, Year] (**Date of the Contract/RFP/DS Auction**) between Duquesne Light Company (“Company”) and [INSERT] (“DS Supplier”). Terms used but not defined herein shall have the meanings ascribed to them in the Agreement. This Transaction Confirmation shall confirm the following terms of the Transaction agreed to on [Month, Day, Year] (**Date of the current RFP-DS Auction for the tranches the won and will be serving**) (“Transaction Date”).

Product: Full Requirements Service
 DS Customer Group: ~~Large Commercial and Industrial~~HPS-Eligible Class
 Delivery Point: Duquesne Residual Aggregate Zone in PJM Pnode 116472943
 Delivery Period: [Month, Day, Year] through [Month, Day, Year]
 Number of Tranches: [INSERT]
 DS Fixed Percentage: [INSERT] % of DEFAULT SERVICE Load (for applicable customer class)
 DS Fixed Price Adder
 For Hourly Price Service: [INSERT AVERAGE PRICE] per MWh
 Tranche 1 at [INSERT] per MWh
 Tranche 2 at [INSERT] per MWh

In addition to the DS Fixed Price Adder For Hourly Price Service above, the Statement prepared in accordance with Section 9.1(a) also will include DS Variable Payments based on the Company’s billed Hourly Price Service formula rate designed to recover the costs of energy, capacity, ancillary services, and PJM administrative costs found in Rider No. 9 of the DS Tariff. The DS Variable Payments associated with serving the DS Supplier Responsibility Share of the DS Supply for ~~Large Commercial and Industrial~~HPS-Eligible Class are based on a) hourly energy charges provided at the day-ahead PJM locational marginal prices based on the customer’s real time metered hourly load, plus energy-related ancillary services including PJM administrative charges, adjusted for losses, and b) capacity charges equal to the full PJM Reliability Pricing Model capacity price for the Duquesne Zone, and shall recover the charges associated with the customer’s share of the Company’s capacity obligation assigned by PJM, plus the charges for capacity based ancillary services. The PMEAFMEAF Adjustment Amount calculated in accordance with Section 9.1 (d) will include: any adjustments to account for changes in the hourly energy or capacity volumes used to calculate the energy, ancillary services, capacity and other charges. The DS Variable Payments to Hourly Price Service suppliers will not include Pennsylvania gross receipts taxes or the fixed retail administrative charge (other than the DS Fixed Price Adder For Hourly Price Service) included in the DS Tariff.

<u>Alternative Energy Portfolio Standards - Reporting Period</u>	<u>AEC Allocation per Tranche, (AECs)</u>	<u>Total AEC Allocation (AECs)</u>
<u>2021-22</u>		
<u>2022-23</u>		

Please confirm that the terms stated herein accurately reflect the agreement reached on the date above between DS Supplier and Company by returning an executed copy of this Transaction Confirmation by email to the Company at energysupplyjenkins@duqlight.com. The signatories to this Transaction must have the authority to enter into this Transaction.

Duquesne Light Company
 By: _____

[INSERT]
 By: _____

Name: _____ C. James Davis, Jr. _____

Name: _____

Title: _____ *Director, Rates and Energy Procurement* _____

Title:

& Federal/RTO Affairs _____

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EXHIBIT 2
FORM OF NOTICE

Any notices required under this Agreement shall be made as follows:

Buyer: Duquesne Light Company
DS Supplier: [INSERT]

All Notices:

Street: 411 Seventh Ave.
City/State/Zip: Pittsburgh, PA 15219
Attn: Chief Financial Officer
Facsimile: (412) 393-1190
Duns: 007915606
Federal Tax ID Number: 25-0451600

All Notices:

Street:
City/State/Zip:
Attn:
Facsimile:
Duns:
Federal Tax ID Number:

Invoices:

Attn: Supply Procurement – ~~Joan Jenkins~~ John Peoples
Phone: (412) 393-4077/6385
~~Facsimile: (412) 393-5659~~ Email: jpeoples@duqlight.com

Facsimile:

Invoices:

Attn:

Phone:

Scheduling:

Attn: Scheduling – John Peoples
Phone: (412) 393-6385
Email: jpeoples@duqlight.com ~~Facsimile: (412) 393-5659~~

Facsimile:

Scheduling:

Attn:

Phone:

Payments:

Attn: Accounting – Jaime Bachota
Phone: (412) 393-1122
Email: jbachota@duqlight.com ~~Facsimile: (412) 393-6760~~

Facsimile:

Payments:

Attn:

Phone:

Wire Transfer:

BNK: ~~Mellon Bank, N.A.~~
ABA: 043000261
ACCT: 0008061

Wire Transfer

BNK:

ABA:

ACCT:

Credit and Collections:

Attn: Assistant-Treasurer – James Milligan
Phone: (412) 393-1216
Email: jmilligan@duqlight.com Facsimile: (412) 393-6760
Facsimile:

Credit and Collections:

Attn:
Phone:
Facsimile:

With additional Notices of an

Event of Default to:

Attn: Legal Department – Tishekia Williams
Phone: (412) 393-1541
Email: twilliams@duqlight.com Facsimile: (412) 393-5757
Facsimile:

With Additional Notices of an

Event of Default to:

Attn:
Phone:
Facsimile:

EXHIBIT 3
PJM DECLARATION OF AUTHORITY

_____ This Declaration of Authority (“Declaration”) is made this _____ day of _____
Month, _____ Year by the following:

PARTY A: ~~DUQUESNE LIGHT COMPANY (“Party A”)~~

PARTY B: _____ (“Party B”).

RECITALS

_____ WHEREAS, ~~PJM is a Regional Transmission Organization (“RTO”) subject to the jurisdiction of the Federal Energy Regulatory Commission (“FERC”);~~

_____ WHEREAS, ~~PJM Settlement, Inc. (“PJM Settlement”) is a Pennsylvania Non-Profit Corporation, incorporated for the purpose of providing billing and settlement functions and credit and risk management functions for PJM. References to “PJM” in this Declaration are intended to apply to PJM and/or PJM Settlement, as appropriate, with regard to their respective functions.~~

_____ WHEREAS, ~~PJM and PJM Settlement administer centralized markets that clear various electric energy and energy related products among multiple buyers and sellers;~~

_____ WHEREAS, ~~PJM additionally exercises operational control over its members’ transmission facilities whereby PJM provides open access transmission service and control area functions, including economic dispatch and emergency response to ensure reliability;~~

_____ WHEREAS, ~~Party A is a PJM Member and seeks to obtain, or is obtaining, services provided or administered by PJM, seeks to participate, or is participating in, markets administered by PJM, or seeks to engage in, or is engaging in, operations that use or affect the integrated transmission system operated by PJM;~~

_____ WHEREAS, ~~such activities or contemplated activities by Party A and Party B are governed by rights and obligations established by or under the PJM Open Access Transmission Tariff (“Tariff”), the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (“Operating Agreement”), the Reliability Assurance Agreement Among Load-serving Entities in the MAAC Control Zone (“RAA”), and other agreements, manuals, and practices of PJM (the Tariff, the Operating Agreement, the RAA, and such other agreements manuals, and practices of PJM, the “PJM Agreements”); and~~

~~WHEREAS, Party A and Party B desire to declare to PJM their respective authorities concerning such rights and obligations, intend that PJM rely upon such declaration, and acknowledge that PJM may rely upon such declaration to its detriment.~~

DECLARATION

~~NOW, THEREFORE, acknowledging that PJM will rely on the truth, accuracy and completeness of the declarations made below, Party A and Party B, as identified below, make the following declarations:~~

~~1. Exclusivity of Party B's Authority.~~

~~Pursuant to a binding, legally enforceable agreement, Party A has authorized Party B to act for Party A with respect to certain rights and responsibilities as specified in Section 2 of this Declaration ("the Authorized Rights and Responsibilities"). With respect to the Authorized Rights and Responsibilities, Party B is authorized to communicate and transact with PJM as Party A's sole and exclusive Party B, and PJM is authorized to communicate and transact directly and exclusively with Party B as Party A's Party B. With respect to Authorized Rights and Responsibilities, Party A will abide by any direction issued by PJM to Party B.~~

~~2. Specification of Authorized Rights and Responsibilities.~~

~~In the following parts (a) through (h), Party A and Party B specify the rights and responsibilities with respect to which Party B is authorized to act for Party A. Specification shall be effective only if both Party A and Party B have placed the initials of their authorized representatives in the space provided for each applicable right or responsibility from among the options provided below:~~

~~(a) Load Server Responsibilities.~~

~~Party B is authorized to satisfy Party A's obligations as a Load Serving Entity under the RAA, including, without limitation, its obligations to provide Unforced Capacity, submit capacity plans, provide or arrange for Capacity Resources, satisfy Accounted for Obligations and Peak Season Maintenance Obligations, comply with any capacity audits, make payment of all deficiency, data submission, and emergency procedure charges incurred, coordinate planning and operation of Capacity Resources with other parties, and develop and submit planned outage schedules.~~

~~Party B is authorized to satisfy Party A's obligations under the Tariff, RAA and to provide or arrange for transmission service to its loads; provide or arrange for sufficient reactive capability, voltage control facilities, and black start capability for service to its loads; submit firm transmission service schedules, and designate Network Resources and other points of receipt and delivery for transmission service. Party B is authorized to~~

~~request changes to the transmission service required for service to Party A's loads, and to enter into, on Party A's behalf, any feasibility, system impact, facilities study, or other agreements required to process such request for a change in service.~~

~~Party B is authorized to satisfy Party A's rights and obligations under the Tariff and Operating Agreement to submit bids on, obtain, administer, and receive payments or credits for Financial Transmission Rights and Auction Revenue Rights with respect to service to Party A's loads.~~

~~Party B is authorized to provide data required by PJM with respect to service to Party A's loads, including, but not limited to, data required for coordination of operations, accounting for all interchange transactions, preparation of required reports and maintenance schedules, and analysis of system disturbances.~~

~~Party B is authorized to provide the facilities and personnel required to coordinate operations with PJM and other PJM Members.~~

~~(b) Electric Distributor Responsibilities:~~

~~Party B is authorized to satisfy Party A's rights and obligations as an Electric Distributor under the Operating Agreement, including, but not limited to, assuring the continued compatibility of its local energy management, monitoring, and telecommunications systems with PJM's technical requirements; providing or arranging for the services of a 24-hour local control center to coordinate with PJM; providing to PJM all system, accounting, customer tracking, load forecasting, and other data necessary or appropriate to implement or administer the Operating Agreement, RAA; shedding connected load, initiating active load management programs, and taking such other coordination actions as may be necessary in accordance with PJM's directions in Emergencies; maintaining or arranging for a portion of its connected load to be subject to control by automatic underfrequency, under-voltage, or other load-shedding devices; and complying with the underfrequency relay obligations and charges specified in the Operating Agreement.~~

~~(c) Generator Responsibilities:~~

~~Party B is authorized to operate the Party A's generation resources in all events, including, but not limited to, in the event of Emergencies, and shall operate such resources in a manner that is consistent with the standards, requirements or directions of PJM and that will permit PJM to perform its obligations under the Operating Agreement, Tariff, RAA, and other applicable agreements, manuals, and practices.~~

~~_____ Party B is authorized to ensure that the required portion of Party A's Capacity Resources have the ability to go from a shutdown condition to an operating condition and start delivering power without assistance from the power system.~~

~~_____ Or _____~~

~~_____ Party B is authorized to direct the operation of Party A's generation resources by relaying PJM's instructions to the resource in all events, including, but not limited to, in the event of Emergencies, and shall direct such resources in a manner that is consistent with the standards, requirements or directions of PJM and that will permit PJM to perform its obligations under the Operating Agreement, Tariff, RAA, and other applicable agreements, manuals, and practices.~~

~~_____ Party B is authorized to communicate with PJM in all matters concerning the provision of capacity, energy, or ancillary services from Party A's generation resources, including, without limitation, information required in connection with Capacity Resources, dispatch of any unit, provision of reactive power, regulation, synchronous condensing, spinning or other reserves, establishment or maintenance of a unit as a Black Start Unit, satisfaction of must run obligations, and costs or revenue requirements for any product or service offered by any such unit.~~

~~_____ Party B is authorized to provide information on outages of Party A's generation facilities, whether planned, forced, or for maintenance, and to coordinate such outages with PJM~~

~~_____ Party B is authorized to act on behalf of Party A with respect to Party A's rights and obligations under any Feasibility Study, System Impact Study, or Facilities Study Agreements.~~

~~_____ Party B is authorized to act on behalf of Party A with respect to Party A's rights and obligations under any Construction Service Agreements.~~

~~_____ Party B is authorized to act on behalf of Party A with respect to Party A's rights and obligations under any Interconnection Service Agreements.~~

~~_____ Party B is authorized to receive from PJM historic and real time data collected by PJM from, or provided to PJM by, Party A with respect to Party A's generation resources.~~

~~_____ Party B is authorized to act on behalf of Party A for the following specific unit(s) in Party A primary and subaccounts:~~

~~Resource Name: _____ Resource ID: _____~~

~~(d) Market Buyer/Market Seller Responsibilities:~~

~~Party B is authorized to satisfy Party A's rights and obligations as a Market Buyer or Market Seller under the Operating Agreement, including, but not limited to, arranging for a Market Operations Center capable of real-time communication with PJM during normal and Emergency conditions; reporting to PJM sources of energy available for operation; providing to PJM scheduling and other information, including, but not limited to, maintenance and other anticipated outages of generation or transmission facilities, scheduling and related information on bilateral transactions and self-scheduled resources, and implementation of active load management, interruption of load, and other load reduction measures; obtaining Spot Market Backup for bilateral transactions; submitting to PJM binding offers to purchase or sell energy and ancillary services in compliance with all applicable Offer Data specifications; responding to PJM's directives to start, shut down or change output levels of generation units, or change scheduled voltages or reactive output levels; responding to PJM's directives to schedule delivery or change delivery schedules for external resources; and following PJM's directions to take actions to prevent, manage, alleviate or end an Emergency.~~

~~(e) Billing and Payment Responsibilities:~~

~~In connection with all rights and responsibilities specified by Party A and Party B in any of subparts (a) through (d) of this Section, Party B shall be billed for, and shall make payment to PJM for, all charges, penalties, costs and fees. (If this option is not specified, PJM will issue billings to, and collect amounts due from, Party A.)~~

~~In connection with all rights and responsibilities specified by Party A and Party B above, Party B is entitled to receive from PJM in Party B's account all credits, revenues, distributions, and disbursements. (If this option is not specified, PJM will pay such amounts to Party A.)~~

~~(f) General Membership Responsibilities:~~

~~Party B is authorized to participate and vote in all PJM committees, working groups, and other stakeholder bodies on Party A's behalf.~~

~~Party B is authorized to participate on Party A's behalf in the regional transmission expansion planning process.~~

~~Party B is authorized to provide information or otherwise cooperate on Party A's behalf in connection with any investigation or request for information~~

~~by PJM or the PJM Market Monitoring Unit in accordance with the Operating Agreement and Attachment M to the Tariff. (If this option is specified, PJM and the PJM Market Monitoring Unit shall have the right to request and obtain such information from Party B and/or Party A.)~~

~~Party B shall be billed for, and shall make payment of, Party A's costs of membership in PJM, including payment of the Membership fee, and payment of any other general assessments on the PJM members, including, but not limited to, amounts assessed as a consequence of defaults by other Members.~~

~~(g) Additional Responsibilities:~~

~~Party B has been Authorized other rights and responsibilities of Party A as specified on Attachment "A" to this Declaration.~~

~~(h) Limitation on Responsibilities:~~

~~The rights and responsibilities specified in parts (a) through (f) above apply to a limited portion of Party A's facilities or loads located in the PJM Region, as specified on Attachment "B" to this Declaration, and to no other facilities or loads of Party A.~~

~~**3. Continuing Responsibilities and Liabilities of Party A.**~~

~~3.1 The Authorized Rights and Responsibilities are the only rights and responsibilities under the PJM Agreements for which Party B is authorized to act for Party A, and Party A retains all rights and responsibilities under the PJM Agreements not specified by Party A and Party B in Section 2.~~

~~3.2 With respect to the Authorized Rights and Responsibilities, and notwithstanding any other provision of this Agreement, Party A shall remain liable to PJM for all amounts due or to become due to PJM under the PJM Agreements, and Party B's authorization to make payment of any such amounts hereunder (if specified in Section 2) shall not release Party A from liability for any financial obligations to PJM not satisfied by Party B.~~

~~**4. Reliance and Indemnity, Duty to Inform, Liability Waiver, and Rules of Construction.**~~

~~4.1 Party A and Party B each recognizes, accepts and intends that PJM will rely, upon on the truth, accuracy and completeness of the declarations herein in matters including but not limited to creditworthiness and in assuring compliance with the PJM Agreements. Party A and Party B each recognizes and accepts that PJM or its members may suffer losses and damages if any~~

~~declaration is or becomes untrue, inaccurate or incomplete, and each agrees to indemnify PJM for any such losses and damages.~~

~~4.2 Party A and Party B each has a continuing duty to notify PJM if and when any declaration herein ceases to be truthful, accurate or complete. Until such time as PJM receives written notification of any change to any declaration, in accordance with the terms contained herein, PJM shall be entitled to rely perpetually on this Declaration as governing its relationship with Party A and Party B as to the subject matter of this Declaration. Written notice of changes to the declarations contained herein must be provided by Party A (PJM Member) to PJM at least thirty days in advance of their effectiveness. If Party B is also a PJM Member, then both parties will be required to provide thirty days prior written notification in order for such changes to be effective. Such notification is required for changes to the declarations and responsibilities contained herein and/or termination of this Declaration. Upon such termination, all rights, responsibilities and accounts will revert back to the original status quo prevailing before the Declaration became effective. Should less than thirty days notice be provided, PJM shall use its best efforts to accommodate and process the declarations herein, but all attempts should be made to provide such notice.~~

~~4.3 Nothing in this Declaration shall be construed to create or give rise to any liability on the part of PJM and Party A and Party B expressly waive any claims that may arise against PJM under this Declaration. This Declaration shall not be construed to modify any of the PJM Agreements and in the event of conflict between this Declaration and a PJM Agreement, the applicable PJM Agreement shall control.~~

~~4.4 Capitalized terms used herein that are not defined herein have the meanings given in the PJM Agreements, as applicable.~~

~~4.5 The Recitals are hereby incorporated into the body of this Declaration.~~

~~IN WITNESS WHEREOF, Party A and Party B execute this Declaration to be effective as of the date written above or upon receipt of a fully executed original by PJM, whichever date is later.~~

PARTY A: _____	PARTY B: _____
Signature: _____	Signature: _____
Name: C. James Davis, Jr. _____	Name: _____
Title: Director, Rates and Energy Procurement & Federal/RTO Affairs _____	Title: _____
Company: Duquesne Light Company _____	Company: _____

DECLARATION OF AUTHORITY

Attachment A — Addendum

PRINCIPAL: Duquesne Light Company

AGENT: [INSERT]

Effective Starting Date: [INSERT]

Note: Principal and Agent are required to provide PJM Settlement thirty days written notice prior to the date of expiration. Upon expiration all accounts will revert back to their original status.

PJM Billing Line Items — Transfer

Principal and Agent agree that PJM settlement shall transfer all of the following charges directly related to the Principal's share of serving the retail load obligations from the Principal's account(s) to the Agent's account beginning the effective date specified above:

<u>Billing Line Item Number</u>	<u>Billing Line Item</u>
1330 (Charge)	Reactive Supply and Voltage Control from Generation and Other Sources Service
1380 (Charge)	Black Start Service
1611 (Charge)	CP Transitional Locational Reliability
1980 (Charge)	Miscellaneous Bilateral
2140 (Credit)	Non-Firm Point-to-Point Transmission Service
2510 (Credit)	Auction Revenue Rights
2640 (Credit)	Incremental Capacity Transfer Rights

PJM Accounts/Subaccounts

<u>Role</u>	<u>Account Long Name</u>	<u>Account Short Name</u>	<u>PJM Org ID</u>
Principal			
Agent			

EXHIBIT 34

PERFORMANCE ASSURANCE LETTER OF CREDIT

{TO BE ISSUED ON THE LETTERHEAD OF THE ISSUING BANK}

IRREVOCABLE LETTER OF CREDIT NO.

ISSUE DATE _____ EXPIRY DATE _____

APPLICANT
[NAME]
[ADDRESS]

BENEFICIARY
[NAME]
[ADDRESS]

CURRENCY
USD

AMOUNT
*****\$

WE HEREBY ISSUE IN YOUR FAVOR OUR IRREVOCABLE LETTER OF CREDIT NO:
_____ FOR THE ACCOUNT OF _____ ("APPLICANT") FOR AN
AMOUNT OR AMOUNTS NOT TO EXCEED IN THE AGGREGATE US DOLLARS
_____ AVAILABLE BY YOUR DRAFT(S) AT SIGHT ON THE
BANK OF _____ ("ISSUER") _____ {ADDRESS},
EFFECTIVE _____ AND EXPIRING AT OUR COUNTERS AT
_____ ON OR BEFORE _____ OR ANY

AUTOMATICALLY EXTENDED EXPIRY DATE, AS PROVIDED HEREIN. THIS LETTER OF
CREDIT IS AVAILABLE IN ONE OR MORE DRAFTS UP TO THE AGGREGATE AMOUNT
SET FORTH HEREIN.

THIS LETTER OF CREDIT IS PRESENTABLE AND PAYABLE AT OUR COUNTERS AND
DRAFTS DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF
CREDIT WILL BE HONORED UPON PRESENTATION TO ISSUER OF THE FOLLOWING
STATEMENT:

"I HEREBY CERTIFY THAT BENEFICIARY, DUQUESNE LIGHT COMPANY,
IS ENTITLED TO DRAW THE AMOUNT OF THE ACCOMPANYING DRAFT
UNDER LETTER OF CREDIT NO. _____, ISSUED BY
_____ {ISSUER'S NAME} AND THAT SUCH DRAFT
REPRESENTS AN AMOUNT DUE AND PAYABLE TO BENEFICIARY FROM
_____ {APPLICANT'S NAME} FOR PERFORMANCE
ASSURANCE RELATED TO THE DEFAULT SUPPLY MASTER
AGREEMENT(S) DATED _____ BETWEEN BENEFICIARY
AND APPLICANT."

THE AMOUNT WHICH MAY BE DRAWN BY BENEFICIARY UNDER THIS LETTER OF CREDIT SHALL BE AUTOMATICALLY REDUCED BY THE AMOUNT OF ANY DRAWINGS PAID THROUGH ISSUER REFERENCING THIS LETTER OF CREDIT NO. _____.

IF PRESENTATION OF ANY DRAWING IS MADE ON A BUSINESS DAY (AS HEREIN DEFINED) AND SUCH PRESENTATION IS MADE ON OR BEFORE 11:00 A.M. NEW YORK TIME, ISSUER WILL SATISFY SUCH DRAWING REQUEST ON THE NEXT BUSINESS DAY. IF THE DRAWING IS RECEIVED AFTER 11:00 A.M. NEW YORK TIME, ISSUER WILL SATISFY SUCH DRAWING REQUEST ON THE SECOND FOLLOWING BUSINESS DAY.

IT IS A CONDITION OF THIS LETTER OF CREDIT THAT IT WILL BE AUTOMATICALLY EXTENDED WITHOUT AMENDMENT FOR ONE (1) YEAR FROM THE EXPIRATION DATE HEREOF, OR ANY FUTURE EXPIRATION DATE, UNLESS AT LEAST 90 DAYS PRIOR TO ANY EXPIRATION DATE WE NOTIFY YOU AT THE ABOVE ADDRESS BY REGISTERED MAIL OR HAND DELIVERED COURIER THAT WE ELECT NOT TO CONSIDER THIS LETTER OF CREDIT RENEWED FOR ANY SUCH PERIOD.

THIS LETTER OF CREDIT MAY BE TERMINATED UPON BENEFICIARY'S RECEIPT OF FULL PAYMENT FROM APPLICANT AND ISSUER'S RECEIPT OF A WRITTEN RELEASE FROM BENEFICIARY RELEASING ISSUER FROM ITS OBLIGATIONS UNDER THIS LETTER OF CREDIT.

THE TERM "BUSINESS DAY" AS USED HEREIN MEANS ANY DAY OTHER THAN (I) A SATURDAY, (II) A SUNDAY, OR (III) A DAY ON WHICH BANKING INSTITUTIONS LOCATED IN THE CITY OF NEW YORK, NEW YORK ARE REQUIRED OR AUTHORIZED BY LAW TO BE CLOSED.

APPLICANT'S FILING OF A BANKRUPTCY, RECEIVERSHIP OR OTHER DEBTOR-RELIEF PETITION, AND/OR APPLICANT'S DISCHARGE THEREUNDER, SHALL IN NO WAY AFFECT THE LIABILITY OF ISSUER UNDER THIS LETTER OF CREDIT AND ISSUER SHALL ALWAYS REMAIN LIABLE TO BENEFICIARY FOR THE FULL AMOUNT OF APPLICANT'S OBLIGATIONS TO BENEFICIARY AS SET FORTH HEREIN NOT TO EXCEED THE AVAILABLE AMOUNT IN THIS LETTER OF CREDIT.

ADDITIONAL TERMS AND CONDITIONS:

1. ALL COMMISSIONS AND OTHER BANKING CHARGES WILL BE BORNE BY APPLICANT.
2. THIS LETTER OF CREDIT MAY BE TRANSFERRED OR ASSIGNED.
3. THIS LETTER OF CREDIT IS IRREVOCABLE.
4. THIS LETTER OF CREDIT IS SUBJECT TO THE INTERNATIONAL STANDBY PRACTICES (1998) OF THE INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 590 ("ISP98") OR SUCH LATER REVISIONS(S) OF THE ISP AS MAY BE HEREAFTER ADOPTED. AS TO MATTERS NOT GOVERNED BY ISP98, THIS LETTER OF CREDIT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, INCLUDING, TO THE EXTENT NOT INCONSISTENT WITH

ISP98, THE UNIFORM COMMERCIAL CODE AS IN EFFECT IN THE STATE OF PENNSYLVANIA. THIS LETTER OF CREDIT MAY NOT BE AMENDED, CHANGED OR MODIFIED WITHOUT THE EXPRESS WRITTEN CONSENT OF BENEFICIARY AND ISSUER.

5. BENEFICIARY SHALL NOT BE DEEMED TO HAVE WAIVED ANY RIGHTS UNDER THIS LETTER OF CREDIT, UNLESS BENEFICIARY OR AN AUTHORIZED AGENT OF BENEFICIARY SHALL HAVE SIGNED A DATED WRITTEN WAIVER. NO SUCH WAIVER, UNLESS EXPRESSLY SO STATED THEREIN, SHALL BE EFFECTIVE AS TO ANY TRANSACTION THAT OCCURS SUBSEQUENT TO THE DATE OF THE WAIVER, NOR AS TO ANY CONTINUANCE OF A BREACH AFTER THE WAIVER.

6. A FAILURE TO MAKE ANY PARTIAL DRAWINGS AT ANY TIME SHALL NOT IMPAIR OR REDUCE THE AVAILABILITY OF THIS LETTER OF CREDIT IN ANY SUBSEQUENT PERIOD OR OUR OBLIGATION TO HONOR YOUR SUBSEQUENT DEMANDS FOR PAYMENT MADE IN ACCORDANCE WITH THE TERMS OF THIS LETTER OF CREDIT.

AUTHORIZED SIGNATURE: _____

TITLE: _____

PLEASE DIRECT ANY WRITTEN CORRESPONDENCE, INCLUDING DRAWING OR INQUIRIES TO:

[BANK NAME, ADDRESS AND PHONE NUMBER]

EXHIBIT 54

FORM OF GUARANTY

THIS GUARANTY AGREEMENT (this "Guaranty") is made and entered into as of this day of _____, by _____ ("Guarantor"), with an address at _____, in favor of Duquesne Light Company ("Creditor"), with an address at 411 Seventh Avenue, Pittsburgh, PA 15219, in consideration of the Default Supply Master Agreement(s) (the "DSMA(s)") between Creditor and _____ ("Seller") dated _____, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged.

WHEREAS, Guarantor is an _____ of Seller, and will therefore benefit by Seller entering into the DSMA with Creditor and Guarantor desires Creditor to enter into the DSMA with Seller and to extend credit to Seller thereunder.

WHEREAS, without this Guaranty, Creditor would not execute and deliver the DSMA or consummate the transactions contemplated thereby. Therefore, in consideration of the execution and delivery by Creditor of the DSMA and consummation of the transactions contemplated thereby, Guarantor has agreed to execute and deliver this Guaranty.

NOW, THEREFORE, in consideration of the premises, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Guarantor hereby agrees as follows:

1. Guaranty of Obligations.

(a) Guarantor hereby irrevocably and unconditionally guarantees, as primary obligor and not a surety with effect from date hereof, the prompt and complete payment when due of all of Seller's payment obligations under the DSMA, whether on scheduled payment dates, when due upon demand, upon declaration of termination or otherwise, in accordance with the terms of the DSMA and giving effect to any applicable grace period, and all reasonable out-of-pocket costs and expenses incurred by Creditor in the enforcement of Guarantor's obligations or collection under this Guaranty, including reasonable attorney's fees and expenses (collectively, the "Obligations").

(b) The limitations on liabilities of Seller set forth in Article 13 of the DSMA shall also apply to the liabilities of Guarantor hereunder.

2. Nature of Guaranty; Waivers.

(a) This is a guaranty of payment and not of collection and Creditor shall not be required, as a condition of Guarantor's liability, to pursue any rights which may be available to it with respect to any other person who may be liable for the payment of the Obligations. This is not a performance guaranty and Guarantor is not obligated to provide power under the DSMA or this Guaranty.

(b) This Guaranty is an absolute, unconditional, irrevocable (subject to the provisions of Section 12 of this Guaranty) and continuing guaranty and will remain in full force and effect until all of the Obligations have been indefeasibly paid in full, or until the DSMA has been terminated, whichever comes later. This Guaranty will not be affected by any surrender, exchange, acceptance, compromise or release by Creditor of any other party, or any other guaranty or any security held by it for any of the Obligations, by any failure of Creditor to take any steps to perfect or maintain its lien or security interest in or to preserve its rights to any security or other collateral for any of the Obligations or any guaranty, or by any irregularity, unenforceability or invalidity of any of the Obligations (other than any irregularity, unenforceability or invalidity of any of the obligations under the DSMA resulting from the conduct of Creditor) or any part thereof.

(c) Except as to any claims, defenses, rights of set-off or to reductions of Seller in respect of its obligations under the DSMA (all of which are expressly reserved under this Guaranty), Guarantor's obligations hereunder shall not be affected, modified or impaired by any counterclaim, set-off, deduction or defense based upon any claim Guarantor may have against Seller or Creditor, including: (i) any change in the corporate existence (including its charter or other governing agreement, laws, rules, regulations or powers), structure or ownership of Seller or Guarantor; or (ii) any insolvency, bankruptcy, reorganization or other similar proceeding affecting Seller or its assets; or (iii) the invalidity or unenforceability in whole or in part of the DSMA; or (iv) any provision of applicable law or regulations purporting to prohibit payment by Seller of amounts to be paid by it under the DSMA (other than any law or regulation that eliminates or nullifies the obligations under the DSMA).

(d) Guarantor waives notice of acceptance of this Guaranty, diligence, presentment, notice of dishonor and protest and any requirement that at any time any person exhaust any right to take any action against Seller or their assets or any other guarantor or person; provided, however, that any failure of Creditor to give notice will not discharge, alter or diminish in any way Guarantor's obligations under this Guaranty. Guarantor waives all defenses based on suretyship or impairment of collateral or any other defenses that would constitute a legal or equitable discharge of Guarantor's obligations, except any claims or defenses of Seller in respect of its obligations under the DSMA.

(e) Creditor at any time and from time to time, without notice to or the consent of Guarantor, and without impairing or releasing, discharging or modifying Guarantor's liabilities hereunder, may (i) to the extent permitted by the DSMA, change the manner, place, time or terms of payment or performance of, or other terms relating to, any of the Obligations; (ii) to the extent permitted by the DSMA, renew, substitute, modify, amend or alter, or grant consents or waivers relating to any of the Obligations, or any other guaranties for any Obligations; (iii) settle, compromise or deal with any other person, including Seller, with respect to any Obligations in such manner as Creditor deems appropriate at its sole discretion; (iv) substitute, exchange or release any guaranty; or (v) take such actions and exercise such remedies hereunder as Creditor deems appropriate.

3. Representations and Warranties. Guarantor hereby represents and warrants that:

(a) it is a [limited liability company, corporation, limited partnership, general partnership] duly organized, validly existing and in good standing under the laws of the jurisdiction of its [formation, organization, incorporation] and has the [corporate power] [power] and authority to conduct the business in which it is currently engaged and enter into and perform its obligations under this Guaranty;

(b) it has the [corporate power] [power] and authority and the legal right to execute and deliver, and to perform its obligations under, this Guaranty, and has taken all necessary [corporate action] [action] to authorize its execution, delivery and performance of this Guaranty;

(c) this Guaranty constitutes a legal, valid and binding obligation of Guarantor enforceable in accordance with its terms, except as affected by bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting the enforcement of Creditors' rights generally, general equitable principles and an implied covenant of good faith and fair dealing;

(d) the execution, delivery and performance of this Guaranty will not violate any provision of any requirement of law or contractual obligation of Guarantor (except to the extent that any such violation would not reasonably be expected to have a material adverse effect on Guarantor or this Guaranty);

(e) no consent or authorization of, filing with, or other act by or in respect of, any arbitrator or governmental authority and no consent of any other person (including, without limitation, any stockholder or of Guarantor) is required in connection with the execution, delivery, performance, validity or enforceability of this Guaranty, other than any which have been obtained or made prior to the date hereof and remain in full force and effect; and

(f) no litigation, investigation or proceeding of or before any arbitrator or governmental authority is pending or, to the knowledge of Guarantor, threatened by or against Guarantor that would have a material adverse effect on this Guaranty.

4. Repayments or Recovery from Creditor. If any demand is made at any time upon Creditor for the repayment or recovery of any amount received by it in payment or on account of any of the Obligations, including but not limited to upon the bankruptcy, insolvency, dissolution or reorganization of Seller and if Creditor repays all or any part of such amount by reason of any judgment, decree or order of any court or administrative body or by reason of any settlement or compromise of any such demand, Guarantor (subject to Sections 2 (c) and (d) of this Guaranty) will be and remain liable hereunder for the amount so repaid or recovered to the same extent as if such amount had never been received originally by Creditor. The provisions of this section will be and remain effective notwithstanding any contrary action which may have been taken by Guarantor in reliance upon such payment, and any such contrary action so taken will be without prejudice to Creditor's rights hereunder and will be deemed to have been conditioned upon such payment having become final and irrevocable.

5. Enforceability of Obligations. No modification, limitation or discharge of the Obligations of Seller arising out of or by virtue of any bankruptcy, reorganization or similar proceeding for relief

of debtors under federal or state law will affect, modify, limit or discharge Guarantor's liability in any manner whatsoever and this Guaranty will remain and continue in full force and effect and will be enforceable against Guarantor to the same extent and with the same force and effect as if any such proceeding had not been instituted. Guarantor waives all rights and benefits which might accrue to it by reason of any such proceeding and will be liable to the full extent hereunder, irrespective of any modification, limitation or discharge of the liability of Seller that may result from any such proceeding.

6. Postponement of Subrogation. Only to the extent that, at the relevant time, there are Obligations, or other amounts hereunder, that are then due and payable but unpaid, Guarantor postpones and subordinates in favor of Creditor any and all rights which Guarantor may have to (a) assert any claim against Seller based on subrogation rights with respect to payments made by Guarantor hereunder and (b) any realization on any property of Seller, including participation in any marshalling of Seller's assets. Upon payment of such due and unpaid Obligations, Creditor agrees that Guarantor shall be subrogated to the rights of Creditor against Seller to the extent of Guarantor's payment to Creditor.

7. Notices. All notices, demands, requests, consents, approvals and other communications required or permitted hereunder must be in writing and will be effective upon receipt. Such notices and other communications may be hand-delivered, sent by ~~facsimile~~ email transmission with confirmation of delivery and a copy sent by first-class mail, or sent by nationally recognized overnight courier service, to the addresses for Creditor and Guarantor set forth below or to such other address as one may give to the other in writing for such purpose:

All communications to Creditor shall be directed to:

Attn:
Phone:
~~Fax:~~ Email:
With a copy to:

Phone:
~~Fax:~~ Email:

or such other address as Creditor shall from time to time specify to Guarantor.

All communications to Guarantor shall be directed to:

Attn:
Phone:
~~Fax:~~ Email:

or such other address as Guarantor shall from time to time specify to Creditor.

8. Preservation of Rights. Except as provided by any applicable statute of limitations, no delay or omission on Creditor's part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will Creditor's action or inaction impair any such right or power. Creditor's rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which Creditor may have under other agreements with Guarantor, at law or in equity.

9. Illegality. In case any one or more of the provisions contained in this Guaranty should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

10. Amendments. No modification, amendment or waiver of any provision of this Guaranty nor consent to any departure by Guarantor therefrom, will be effective unless made in a writing signed by Creditor, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on Guarantor in any case will entitle Guarantor to any other or further notice or demand in the same, similar or other circumstance.

11. Entire Agreement. This Guaranty (including the documents and instruments referred to herein) constitutes the entire agreement and supersedes all other prior agreements and understandings, both written and oral, between Guarantor and Creditor with respect to the subject matter hereof.

12. Successors and Assigns. This Guaranty will be binding upon and inure to the benefit of Guarantor and Creditor and their respective successors and permitted assigns. Neither party may assign this Guaranty in whole or in part without the other's prior written consent, which consent will not be unreasonably withheld or delayed, except that Creditor may at any time assign this Guaranty without Guarantor's consent, in the same manner, on the same terms and to the same persons as Creditor assigns the DSMA in accordance with Section 163 of the DSMA, and except that this Section 12 shall not limit Guarantor's right to assign this Guaranty, along with substantially all of Guarantor's assets and business to a successor entity or Affiliate that assumes all obligations thereunder and (i) where the successor Guarantor's Lowest Credit Rating is equal to or greater than Guarantor's Lowest Credit Rating or where the successor Guarantor's Lowest Credit Rating is equal to or greater than BBB-, as rated by S&P or Fitch, or Baa3₂, as rated by Moody's, and (ii) Seller is in compliance the DSMA. The "Lowest Credit Rating" shall mean the lowest of the senior unsecured long-term debt ratings determined by Moody's Investor Services, Inc. (or its successor) ("Moody's"), the Standard & Poor's Rating Group, a division of McGraw-Hill, Inc., (or its successor) ("S&P"), or Fitch Investor Service, Inc. (or its successor) ("Fitch") immediately before such transfer and assumption. Upon any such delegation and assumption of obligations by a successor Guarantor, Guarantor shall be relieved of and fully discharged from all of its obligations hereunder, whether such obligations arose before or after the date of such delegation and assumption.

13. Interpretation. In this Guaranty, unless Creditor and Guarantor otherwise agree in writing, the singular includes the plural and the plural the singular; references to statutes are to be construed as including all statutory provisions consolidating, amending or replacing the statute referred to; the word "or" shall be deemed to include "and/or", the words "including", "includes" and "include" shall be deemed to be followed by the words "without limitation"; and references to sections or

exhibits are to those of this Guaranty unless otherwise indicated. Section headings in this Guaranty are included for convenience of reference only and shall not constitute a part of this Guaranty for any other purpose.

14. Governing Law.

(a) This Guaranty has been delivered to and accepted by the Creditor. THIS GUARANTY WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF CREDITOR AND GUARANTOR DETERMINED IN ACCORDANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA, EXCLUDING ITS CONFLICT OF LAWS RULES.

(b) Guarantor hereby irrevocably consents to the jurisdiction of the federal district court for the Western District of Pennsylvania or to the county court jurisdiction of the Allegheny County Court of Common Pleas; provided that nothing contained in this Guaranty will prevent Creditor from bringing any action, enforcing any award or judgment or exercising any rights against Guarantor individually, against any security or against any property of Guarantor within any other county, state or other foreign or domestic jurisdiction. Guarantor acknowledges and agrees that the venue provided above is the most convenient forum for both Creditor and Guarantor. Guarantor waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Guaranty.

15. WAIVER OF JURY TRIAL. GUARANTOR AND CREDITOR IRREVOCABLY WAIVE ANY AND ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS GUARANTY, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS GUARANTY OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. GUARANTOR AND CREDITOR ACKNOWLEDGE THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

16. Term. This Guaranty shall survive termination of the DSMA and remain in full force and effect until all amounts due hereunder, including all of the Obligations, have been paid or performed in full.

17. Stay of Acceleration Ineffective with Respect to Guarantor. If acceleration of the time for payment of any amount payable by Seller under the DSMA is stayed upon the insolvency, bankruptcy or reorganization of Seller, all such amounts otherwise subject to acceleration or required to be paid upon an early termination pursuant to the terms of the DSMA shall nonetheless be payable by Guarantor hereunder on written demand by Creditor.

Guarantor acknowledges that it has read and understood all the provisions of this Guaranty, and has been advised by counsel as necessary or appropriate.

ATTEST:

[Guarantor]

By: _____

Exhibit JP-3

Name: _____

Title: _____

**PENNSYLVANIA UNIVERSAL
DEFAULT SUPPLIER MASTER AGREEMENT**

by and between

Duquesne Light Company

and

[INSERT]

Dated [Month, Day, Year]

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PENNSYLVANIA DEFAULT SERVICE SUPPLIER MASTER AGREEMENT

THIS DEFAULT SERVICE SUPPLIER MASTER AGREEMENT, made and entered into this ____ day of [Month, Day, Year] (the “Agreement”) by and between Duquesne Light Company (the “Company” and “Buyer”), a limited liability company and a public utility organized and existing under the laws of the Commonwealth of Pennsylvania and [INSERT] (“DS Supplier”), the Company and the DS Supplier hereinafter sometimes referred to collectively as the “Parties”, or individually as a “Party”,

WITNESSETH:

WHEREAS, the Company is an electric public utility engaged, inter alia, in providing retail electric service within its service territory located in the Commonwealth of Pennsylvania; and

WHEREAS, the Pennsylvania Public Utility Commission (“PaPUC” or “Commission”) Orders issued pursuant to the Electricity Generation Customer Choice and Competition Act, 66 Pa.C.S. §§ 2801-2812, direct Buyer to supply electric service to Default Service Load within Buyer’s Pennsylvania franchise service territory; and

WHEREAS, the PaPUC has found that, for periods further identified in Appendix C, it would serve the public interest for the Company to secure Default Service Supply (“DS Supply”) through a competitive procurement process (“DS Solicitation”) and the PaPUC has approved such a process; and

WHEREAS, the Company has conducted and completed a successful DS Solicitation for the provision of DS Supply, and the DS Supplier was one of the winning bidders in the DS Solicitation; and

WHEREAS, pursuant to the competitive bidding procedures of the DS Solicitation, the Company and the DS Supplier desire to enter into this Agreement setting forth their respective rights and obligations concerning the provision of DS Supply.

NOW, THEREFORE, in consideration of the mutual covenants and promises set forth below, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto, intending to be legally bound, hereby covenant, promise and agree as follows:

ARTICLE 1: DEFINITIONS

Any capitalized or abbreviated term not elsewhere defined in this Agreement shall have the definition set forth in this Article.

Alternative Energy Credit or "AEC" – Shall have the meaning ascribed thereto in the AEPS Act.

AEPS Act – The Pennsylvania Alternative Energy Portfolio Standards Act, 73 P.S. §§ 1648.1-1648.8.

Affiliate – Means, with respect to any entity, any other entity that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such entity. For this purpose, "control" means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

Allocated AECs – Shall mean the types and amounts of AECs specified on Appendix E.

Alternative Energy Portfolio Standards or “AEPS” – Standards requiring that a certain amount of electric energy sold to retail electric customers in the Commonwealth of Pennsylvania be composed of electricity generated from alternative energy sources, as measured by AECs, in accordance with the requirements of the AEPS Act and provisions of the Electricity Generation Customer Choice and Competition Act, 66 Pa.C.S. §§ 2804, 2812-14, in effect on the Effective Date including, without limitation, any subsequent increases in Tier I requirements under 66 Pa.C.S. § 2814.

Ancillary Services – Shall have the meaning ascribed thereto in the PJM Agreements.

Applicable Legal Authorities – Those federal and Pennsylvania statutes and administrative rules and regulations that govern the electric utility industry in Pennsylvania, as they may be amended from time to time.

Auction Revenue Rights or “ARR” – The current or any successor congestion management mechanisms as may be employed by PJM (whether set forth in the PJM Agreements or elsewhere) for the purpose of allocating financial congestion hedges or financial transmission auction revenue rights. As currently defined by PJM, ARR are entitlements allocated annually by PJM which entitle the holder to receive an allocation of the revenues from the annual auction of financial transmission rights conducted by PJM pursuant to the PJM Agreements.

Bankruptcy Code – Those laws of the United States of America related to bankruptcy, codified and enacted as Title 11 of the United States Code, entitled “Bankruptcy” and found at 11 U.S.C. § 101 et seq., as such laws may be amended, modified, replaced or superseded from time to time.

Billing Month – Each calendar month during the term of this Agreement.

Business Day – Any day on which the Company’s and PJM’s corporate offices are open for business and commercial banks are not authorized or required to close in New York, New York.

Capacity – “Unforced Capacity” as set forth in the PJM Agreements, or any successor, measurement of the capacity obligation of a Load Serving Entity as may be employed in PJM (whether set forth in the PJM Agreements or elsewhere).

Charge – Any fee, charge or other amount that is billable by the Company to the DS Supplier under this Agreement.

Company – Duquesne Light Company.

Costs – With respect to the Non-Defaulting Party, brokerage fees, commissions and other

similar transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations and/or entering into new arrangements which replace this Agreement; and all reasonable attorneys' fees and expenses incurred by the Non-Defaulting Party in connection with the termination of this Agreement.

Customer – Any person or entity who enters into a contractual agreement with the Company to receive retail electric service including, without limitation, all persons or entities taking service under a retail tariff, eligible to receive competitive electricity supply from an EGS or DS, respectively, in accordance with the Applicable Legal Authorities.

Damages – Financial compensation from the Defaulting Party to the Non-Defaulting Party associated with the occurrence of an Event of Default or an Early Termination of this Agreement. This compensation shall be assessed pursuant to Article 5 of this Agreement.

Default Allocation Assessment – Shall have the meaning ascribed to it under the PJM Agreements.

Defaulting Party – A Party to this Agreement that has caused or precipitated an Event of Default or an Early Termination of this Agreement.

Default Service or “DS” – Electric generation service that is provided at retail pursuant to the Applicable Legal Authorities under the Company's retail electric tariffs and under

any other agreements or arrangements between the Company and Customers, to any Customer that is not being served by an EGS.

Default Service Supply or “DS Supply” – All necessary Energy, Capacity, AECs for AEPS Act compliance, Ancillary Services, all transmission and distribution losses and congestion and imbalance costs associated with the provision of such services, and such other services or products that the DS Supplier may be required, by PJM or any governmental body having jurisdiction, to provide in order to meet the DS Supplier Responsibility Share for serving DS Load under this Agreement and as detailed in Appendix C. For the avoidance of doubt, any reference in this Agreement to any other agreement for DS Supply shall include any agreement between the Parties for the provision of a product or service (e.g., Energy) to serve DS Load, even if such other agreement does not require delivery of additional products or services (e.g., Capacity).

Delivery Period – The delivery period specified in Appendix C.

Delivery Point – Means the applicable zone of the Company as designated by PJM.

DS Customer(s) – Retail customers who are provided Default Service pursuant to the terms of this Agreement, the Applicable Legal Authorities and the Company’s retail tariffs.

DS Fixed Percentage – The percentage of DS Supply, as set forth in Appendix C.

DS Fixed Price – The price in dollars per MWh, as set forth in Appendix C hereto, as determined pursuant to the DS Solicitation.

DS Fixed Price Adder For Hourly Price Service – The fixed price adder for Hourly Price Service in dollars per MWh, as set forth in Appendix C hereto, as determined pursuant to the DS Solicitation.

DS Load – Means the total sales at the retail meter, plus any losses and Unaccounted For Energy (as defined by PJM), as reflected in PJM settlement volumes (including adjustments required by PJM for PJM's derating in conjunction with implementation of marginal losses as appropriate per PJM Agreements), expressed in MWh of retail customers in a particular class of DS Customers being served by Company pursuant to the PUC Orders, as such sales vary from hour to hour, in Company's Pennsylvania franchise service territory, as such territory exists on the Effective Date or may increase or decrease due to de minimis geographic border changes to the service territory that exists on the Effective Date. The DS Load is net of any reduction in load as a result of energy efficiency and demand side response programs offered by Company, PJM, curtailment service providers, or other third parties, or any retail market programs. For avoidance of doubt, DS Load shall not include (i) the amount of load that would otherwise have been served in the absence of such energy efficiency or demand side response programs or retail market programs; or (ii) sales resulting from changes in the Company's Pennsylvania service territory which occur as a result of a merger, consolidation, or acquisition of another entity which has a franchised service territory in

Pennsylvania or a result of a significant franchise territory swap with another entity which has a franchised service territory in Pennsylvania.

DS Solicitation – The competitive bidding processes, procedures and rules employed by the Company to competitively procure DS Supply for purposes of this Agreement.

DS Supplier – An entity that (i) has been selected through the DS Solicitation and has accepted the obligations and associated rights to provide DS Supply to the Company for retail customers in accordance with the Applicable Legal Authorities, (ii) has entered into this Agreement with the Company as a Party, and (iii) is a PJM Member and registered with PJM as a LSE.

DS Supplier Representative – Any officer, director, employee, consultant, contractor, or other agent or representative of the DS Supplier in connection with the DS Supplier's activity under this Agreement. To the extent the DS Supplier is a division or group of a company, the term DS Supplier Representative does not include any person in that company who is not part of the DS Supplier division or group.

DS Supplier Responsibility Share – The fixed percentage share of the Company's DS Load for which the DS Supplier is responsible as set forth in Appendix C.

DS Tariffs – The Company’s existing schedules of rates and services provided to retail customers as currently on file with the Commission and on the Company’s website, as they may be amended from time to time.

DS Variable Payments – The variable supplier payments in dollars based on the Company’s Hourly Price Service formula rate, as set forth in Appendix C hereto, associated with serving the DS Supplier Responsibility Share of the DS Supply.

Early Termination – Termination of this Agreement prior to the end of the term due to the occurrence of an Event of Default as specified in Article 5.2 of this Agreement and the declaration of Early Termination.

Early Termination Date – The date upon which an Early Termination becomes effective as specified in Article 5.2 of this Agreement.

Effective Date – The date designated on the cover page of this Agreement upon which the terms of this Agreement were agreed to by the Parties.

Electric Distribution Company or “EDC” – A public utility providing facilities for the transmission and distribution of electricity to retail customers in Pennsylvania.

Electric Generation Supplier or “EGS” – A person or entity that is duly certified by the Commission to offer and provide competitive electric supply to retail customers located in the Commonwealth of Pennsylvania.

Emergency – (i) an abnormal system condition requiring manual or automatic action to maintain system frequency, or to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property; or (ii) a condition that requires implementation of Emergency Operations Procedures as defined in the PJM Agreements or PJM manuals; or (iii) any other condition or situation that the Company or PJM deems imminently likely to endanger life or property or to affect or impair the Company’s electrical system or the electrical system(s) of other(s) to which the Company’s electrical system is directly or indirectly connected (a “Connected Entity”). Such a condition or situation may include, but shall not be limited to, potential overloading of the Company’s transmission and/or distribution circuits, PJM minimum generation (“light load”) conditions, or unusual operating conditions on either the Company’s or a Connected Entity’s electrical system, or conditions such that the Company is unable to accept Energy from the DS Supplier without jeopardizing the Company’s electrical system or a Connected Entity’s electrical system. Other additional emergencies can only be declared by PJM, FERC, or the PaPUC.

Energy – Three-phase, 60-cycle alternating current electric energy, expressed in units of kilowatt-hours or megawatt-hours.

Event of Default – A Party’s breach of obligations under this Agreement as set forth in Article 5 of this Agreement.

FERC – The Federal Energy Regulatory Commission.

Final Monthly Energy Allocation or “FMEA” – A quantity of Energy which, for any Billing Month, is the PMEA adjusted for any billing or metering data received subsequent to the calculation of PMEA of which PJM is notified within 60 days.

Fixed Price Transaction – A Transaction Confirmation that is not an Hourly Price Transaction.

Force Majeure – Means an event or circumstance which prevents one Party from performing its obligations under one or more transactions, including but not limited to, riots or revolutions, demands or embargoes of the United States Government, fire, flood, drought, insurrection, epidemic, terrorist attack, and acts of God, which are not within the reasonable control of, or the results of the negligence of the affected Party and which, by the exercise of due diligence, the Party is unable to mitigate or avoid or cause to be avoided. Notwithstanding the foregoing, under no circumstance shall an event of Force Majeure be based on: (i) the loss or failure of DS Supplier’s supply; (ii) DS Supplier’s ability to sell the DS Supply at a price greater than that received under any Transaction; (iii) curtailment by a utility transmitting DS Supply; (iv) the Company’s ability to purchase the DS Supply

at a price lower than paid under any Transaction; (v) any change in requirements of any governmental authority; or (vi) labor stoppage or lockout.

Forward Market Price – The price for On-peak Energy Forward Price and Off-peak Energy Forward Price as determined by averaging concurrent broker quotes obtained by the Company for the Market Price Hub as available.

Gains – With respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from an Early Termination of this Agreement, determined in a commercially reasonable manner.

Generator Attribute Tracking System or “GATS” – the system owned and operated by PJM Environmental Services, Inc. to provide reporting and tracking services to its subscribers in support of the AEPS Act, or any successor credit registry selected by the PaPUC. (As specified in Appendix E)

Guaranty – A guaranty, suretyship, hypothecation agreement, margins or security agreement or any other document in the form attached to this DS Supplier Master Agreement or other form approved by the Company.

Guarantor – Any party having the authority and agreeing to guarantee the DS Supplier’s financial obligations under this Agreement, recognizing that such party shall be obligated

to meet the Company's creditworthiness requirements specified in this Agreement for such DS Supplier.

Hourly Price Service – service provided to Hourly Price Service (“HPS”)-Eligible Class pursuant to the Company's DS Tariffs, Retail Tariff, Rider No. 9.

Hourly Price Transaction – A Transaction Confirmation for Hourly Price Service, as shown on such confirmation.

Interest Index – The average Federal Funds Effective Rate for the period of time the funds are on deposit. The Federal Funds Effective Rate is published daily on the Federal Reserve website (<http://www.federalreserve.gov/releases/h15/update/>).

Kilowatt or “kW” – Unit of measurement of useful power equivalent to 1000 watts.

Kilowatt-hour or “kWh” – One kilowatt of electric power used over a period of one hour.

Load Serving Entity or “LSE” – An entity that has been granted the authority or has an obligation pursuant to state or local law, regulation or franchise to sell electricity to retail customers located within the PJM Control Area as that term is defined in the PJM Agreements or in successor, superseding or amended versions of the PJM Agreements that may take effect from time to time over the term of this Agreement. The DS Supplier, for

purposes of this Agreement, is not a Load Serving Entity and nothing contained herein shall be deemed to cause the DS Supplier to be a Load Serving Entity.

Losses – With respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from an Early Termination of this Agreement, determined in a commercially reasonable manner.

Margin – The amount by which the Total Exposure Amount exceeds the DS Supplier's, or Guarantor's, credit limit as defined in Section 6.4.

Mark-to-Market ("MtM") Exposure Amount – Shall have the meaning ascribed to it in Section 6.3 of this Agreement.

Market Price Hub – refers to AEP Dayton Hub, a liquid pricing point located within PJM's geographic footprint, at pnode #34497127.

Maximum Credit Limit – The lesser of the applicable percentage of TNW or the applicable credit limit cap as specified in Section 6.4 of this Agreement.

Medium Commercial and Industrial Class – Group of Rate Schedules that comprise the Medium Commercial and Industrial Class for DS Supply and itemized in Appendix C.

Megawatt or MW – One thousand kilowatts.

Megawatt-hour or MWh – One megawatt of electric power used over a period of one hour.

Merger Event – When a DS Supplier consolidates or amalgamates with, or merges into or with, or transfers all or substantially all of its assets to another entity and either (i) the resulting entity fails to assume all of the obligations of such DS Supplier hereunder in the sole discretion of the Company or (ii) the benefits of any credit support provided pursuant to Article 6 of this Agreement fail to extend to the performance by such resulting, surviving or transferee entity of the DS Supplier’s obligations hereunder, and the resulting entity or its guarantor fails to meet the creditworthiness requirements of this Agreement in the sole discretion of the Company.

Minimum Rating – A minimum senior unsecured debt rating as defined in Appendix A of this Agreement.

Minimum Transfer Amount – \$100,000.

NERC – The North American Electric Reliability Corporation or its successor.

Network Integration Transmission Service or “NITS” – “Network Integration Transmission Service” under the PJM Agreements in effect as of the date of this Agreement, or its successor, superseding or amended versions of the PJM Agreements that

may take effect from time to time over the term of this Agreement. In the event the PJM Agreements are modified such that “Network Integration Transmission Service” is no longer offered, Network Integration Transmission Service shall mean the type of transmission service offered under the PJM Agreements that is accorded the highest level of priority for scheduling and curtailment purposes.

Non-Defaulting Party – A Party to this Agreement who, at the time an Event of Default occurs, is not itself in default of this Agreement and has not otherwise caused or precipitated an Event of Default or Early Termination of this Agreement.

Off-Peak Energy Forward Price – Means the price for Off-Peak Hours for each billing month of the delivery period stated in terms of \$/MWh as based on the most recent publicly available information and/or quotes from Reference Market Makers on forward energy transactions occurring at the Market Price Hub. In the event that the Market Price Hub is no longer available or no longer representative of a transparent trading hub, the Parties will negotiate in good faith to agree upon an alternate liquid price.

On-Peak Energy Forward Price – Means the price for On-Peak Hours for each billing month of the delivery period stated in terms of \$/MWh as based on the most recent publicly available information and/or quotes from Reference Market Makers on forward energy transactions occurring at the Market Price Hub. In the event that the Market Price Hub is no longer representative of a transparent trading hub, the Parties will negotiate in good faith to agree upon an alternate liquid price.

PaPUC or Commission – The Pennsylvania Public Utility Commission or its successor.

PJM – PJM Interconnection L.L.C. or its successor.

PJM Agreements – The PJM OATT, PJM RAA, PJM OA and all other PJM agreements, procedures, manuals and documents applicable to the Transactions covered by or relating to this Agreement.

PJM Control Area – That certain Control Area encompassing electric systems in parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia, as may be modified from time to time, and which is recognized by the North American Electric Reliability Council as the "PJM Control Area".

PJM Member – A member in good standing of PJM that satisfies the requirements to conduct business with PJM.

PJM OA – The PJM Operating Agreement or the successor, superseding or amended version of the PJM Operating Agreement that may take effect from time to time.

PJM OATT – The PJM Open Access Transmission Tariff or the successor, superseding or amended version of the PJM Open Access Transmission Tariff that may take effect from time to time.

PJM OI – The PJM Office of Interconnection, the system operator for the PJM Control Area.

PJM RAA – The PJM Reliability Assurance Agreement or the successor, superseding or amended version of the PJM Reliability Assurance Agreement that may take effect from time to time.

PMEA/FMEA Adjustment Amount – For any Billing Month, the monetary amount due to the DS Supplier or the Company, as the case may be, in order to reconcile any difference between the PMEA used for the purpose of calculating estimated payments made to DS Supplier for a given month and the FMEA used for calculating the final payments due to the DS Supplier for such month as more fully described in Article 9 hereof.

Preliminary Monthly Energy Allocation or “PMEA” – A quantity of Energy which, for any Billing Month, is the preliminary calculation of the DS Supplier’s DS Supplier Responsibility Share.

Rate Schedule(s) – Shall mean the specified existing, and modified or successor customer rate schedule(s) in the electric service tariff of the Company filed with the Commission.

Reliability First Corporation or “RFC” – The approved regional NERC entity with responsibility for the Commonwealth of Pennsylvania.

Residential Class – Group of Rate Schedules that comprise the Residential Class for the DS Supply and itemized in Appendix C.

Rounding Amount – \$100,000.

Settlement Amount – With respect to a Non-Defaulting Party, the net amount of the Losses or Gains, and Costs, expressed in U.S. Dollars, which such Party incurs as a result of Early Termination, as set forth in Section 5.4(a) of this Agreement. For the purposes of calculating the Termination Payment, the Settlement Amount shall be considered an amount due to the Non-Defaulting Party under this Agreement if the total of the Losses and Costs exceeds the Gains and shall be considered an amount due to the Defaulting Party under this Agreement if the Gains exceed the total of the Losses and Costs.

Small Commercial and Industrial Class – Group of Rate Schedules that comprise the Small Commercial and Industrial Class for DS Supply and itemized in Appendix C.

Statement – A monthly report prepared by the Company for the DS Supplier indicating the amount due to the DS Supplier by the Company as compensation for DS Supply

supplied to DS Customers by the DS Supplier during the current Billing Month, in accordance with DS Supplier's obligations under this Agreement.

Supply Day – Any calendar day during the term of this Agreement on which the DS Supplier is providing, or is obligated by this Agreement to provide, DS Supply to the Company.

Tangible Net Worth or "TNW" – Total assets less intangible assets and total liabilities. Intangible assets include benefits such as goodwill, patents, copyrights and trademarks.

Termination Payment – A payment resulting from an Early Termination that is calculated in accordance with Article 5.4.

Tier I AEC – Shall mean an AEC that will satisfy the non-solar Tier I requirements of the AEPS Act applicable to the Company. (As specified in Appendix E)

Tier I (Solar) AEC – Shall mean an AEC generated by a solar photovoltaic energy source that will satisfy the Tier I solar photovoltaic requirements of the AEPS Act applicable to the Company. (As specified in Appendix E)

Tier II AEC – Shall mean an AEC generated by a non-solar photovoltaic energy source that will satisfy the non-solar Tier II requirements of the AEPS Act applicable to the Company. (As specified in Appendix E)

Total Exposure Amount – An amount calculated daily for the DS Supplier reflecting the total credit exposure to the Company and consisting of the sum of (i) the Mark-to-Market Exposure Amount arising under this Agreement; (ii) any amount(s) designated as the “Mark-to-Market Exposure Amount” arising under any other DS Supply agreements providing for “DS Supply” or similar default service; and (iii) the amount designated as the “credit exposure” under any other DS Supply agreements providing for DS Supply or similar default service; provided that in the event the amount calculated for any day is a negative number, it shall be deemed to be zero for such day.

Tranche – A fixed percentage share of the Company’s DS Load for the Customer Group as indicated in any given Transaction Confirmation, as specified in Appendix C.

Transaction – Means a particular agreement by which the Company purchases and the DS Supplier sells DS Supply pursuant to this Agreement, the details of which are more fully set forth in Exhibit 1 – Transaction Confirmation.

Transaction Confirmation – Shall have the meaning ascribed to it in Appendix C and Exhibit 1 of this Agreement.

ARTICLE 2: GENERAL TERMS AND CONDITIONS

2.1 Capacity in Which Company Is Entering into this Agreement

The DS Supplier agrees and acknowledges that the Company is contracting for the provision of DS Supply from such DS Supplier for Customers receiving Default Service on the Company's electric system pursuant to the authorizations provided to the Company. The DS Supplier further agrees and acknowledges that the Company will administer and monitor the DS Supplier's performance in providing DS Supply under this Agreement and that the Company shall be entitled to enforce the DS Supplier's obligations related to the provision of DS Supply. The DS Supplier hereby permanently, expressly and irrevocably waives any claim that Company is not entitled to seek enforcement of this Agreement on behalf of Customers. It is the specific intention of the Parties hereto that Customers and Customer groups are not third party beneficiaries of this Agreement and that no Customer or Customer group shall seek enforcement of this Agreement against the DS Supplier on their own behalf, either independently or by joining in any legal proceeding brought by the Company.

The Parties acknowledge that the Agreement is a forward contract and, accordingly, the Parties hereto are entitled to the protections of Section 556 of the Bankruptcy Code. The Parties therefore agree that the Agreement may be terminated by either Party upon the commencement of a proceeding by the other Party under any chapter of the Bankruptcy Code in accordance with Article 5.2 of this Agreement.

2.2 Parties' Obligations

(a) Obligations of DS Supplier

The DS Supplier hereby agrees as follows:

- (i) To provide service on a firm and continuous basis such that the supply delivered for the term of the Agreement meets the terms and conditions set forth in Appendix C;
- (ii) To provide sufficient quantities of DS Supply on an instantaneous basis at all times and supplied to the Delivery Point to meet the DS Supplier Responsibility Share;
- (iii) To procure those services provided by the PJM OI and to perform such functions as may be required by the PJM OI that are necessary for the delivery of DS Supply required hereunder;
- (iv) To cooperate with the Company in any regulatory compliance efforts that may be required to maintain the ongoing legitimacy and enforceability of the terms of this Agreement and to fulfill any regulatory reporting requirement associated with the provision of DS Supply, before the PaPUC, FERC or any other regulatory body asserting jurisdiction;
- (v) To pay to the Company the PMEA/FMEA Adjustment Amount for any Billing Month in which the PMEA exceeds the FMEA, as more fully described in Article 9 of this Agreement;
- (vi) To accept assignment of and to fulfill all obligations of a LSE that are assigned to it by this Agreement;
- (vii) To comply in a timely manner with all obligations under this Agreement imposed upon the DS Supplier; and
- (viii) To comply with the AEPS requirements of the Company's Default Service Plan, as detailed in Appendix E.

(b) Obligations of the Company

The Company hereby agrees as follows:

- (i) To pay to each DS Supplier every month an amount due, resulting from the calculations, as detailed in Article 9 of this Agreement, subject to the adjustments as expressed therein;
- (ii) To pay to the DS Supplier the PMEA/FMEA Adjustment Amount for any Billing Month in which the FMEA exceeds the PMEA, as more fully described in Article 9 of this Agreement;
- (iii) To provide to the DS Supplier its estimated aggregate load obligation (capacity MW value) for each Supply Day no less than five (5) calendar days prior to the day of delivery. Further, this information will be posted in the DS Supplier's specific PJM PowerMeter account, or successor system or process;
- (iv) To comply in a timely manner with all obligations under this Agreement imposed upon the Company;
- (v) To accept the delivery of DS Supply necessary to meet the DS Load;
- (vi) To be responsible (as between the Company and the DS Supplier) for the provision of the Allocated AECs to satisfy AEPS requirements; and
- (vii) To be the Load Serving Entity for supply purchased under this Agreement.

2.3 Congestion and Congestion Management

The DS Supplier is responsible for any congestion costs incurred to meet the DS Supplier Responsibility Share. The Company shall transfer or assign to the DS Supplier the Company's rights to Auction Revenue Rights (ARRs) to which the Company is entitled

as an LSE pursuant to the PJM Agreements, including the rights to ARRs, provided that such rights are related to the service being provided to meet the DS Supplier Responsibility Share and such rights are for the Delivery Period. All rights, liabilities and obligations associated with such ARRs will accrue and be assumed by the DS Supplier through the transfer or assignment from the Company to the DS Supplier including the responsibility and ability of the DS Supplier to request or nominate such ARRs when applicable and feasible. Should the conditions above not be met, the entity recognized by PJM as having the right to make the nominations will nominate such ARRs for the upcoming PJM planning period and such ARRs will be allocated to the DS Supplier in accordance with the PJM Agreements based upon its DS Supplier Responsibility Share.

2.4 PJM Services

The DS Supplier shall make all necessary arrangements for the delivery of DS Supply through the PJM OI. The Company will advise the PJM OI of the magnitude and location of each DS Supplier's actual DS Supplier Responsibility Share, as required by the PJM OI, for the purpose of calculating such DS Supplier's appropriate DS Supply requirements related to the provision of service under this Agreement by DS Supplier arising under the PJM Agreements. The DS Supplier shall remain responsible to PJM for the performance of its LSE obligations associated with the provision of DS Supply under this Agreement until the effective date of the transfer of such LSE obligations.

The Company shall generate and provide in writing to DS Supplier the PJM shortname(s) associated with supplier's unique contract type(s), as necessary. Unique shortname(s) may be generated for each differing contract type. DS Supplier shall complete all required forms and processing to PJM to create shortname(s) within the PJM

system.

For the period of time this Agreement is in effect, both the Company and DS Supplier shall have executed the PJM Declaration of Authority, and shall remain in effect during the Term of this Agreement. In the event PJM requires that the Declaration of Authority be amended after execution by the DS Supplier, DS Supplier agrees to execute a revised Declaration of Authority in accordance with PJM requirements.

2.5 PJM Agreement Modifications

(a) If the PJM Agreements are amended or modified so that any schedule or section reference herein to such agreements is changed, such schedule or section reference herein shall be deemed to automatically (and without any further action by the Parties) refer to the new or successive schedule or section in the PJM Agreements which replaces that originally referred to in this Agreement.

(b) If the applicable provisions of the PJM Agreements referenced herein, or any other PJM rules relating to the implementation of this Agreement, are changed materially from those in effect on the Effective Date, both Parties shall cooperate to make conforming changes to this Agreement to fulfill the purposes of this Agreement, including the DS Supplier's responsibility for changes in PJM products and pricing during the Term. DS Supplier bears the risk and responsibility of all charges resulting from any changes in PJM products and pricing during the term of this Agreement with the exception of (i) future PJM charges related solely to the Company providing network transmission service, and (ii) those charges identified as EDC responsibility in Appendix D, including for transition costs related to the elimination of through-and-out transmission rates.

2.6 PJM Member Default Cost Allocation

In the event PJM imposes a Default Allocation Assessment upon the Company relating to a default during the Term, the Company shall invoice DS Supplier, and DS Supplier shall pay an amount equal to the product of (i) DS Supplier Responsibility Share, and (ii) the Default Allocation Assessment.

2.7 Other Fines and Penalties

If fees, fines, penalties, or costs are claimed or assessed against the Company by any Applicable Legal Authority or PJM due to noncompliance by the DS Supplier with this Agreement, any other requirements of law, or the PJM Agreements, the DS Supplier shall indemnify and hold the Company harmless against any and all losses, liabilities, damages, and claims suffered or incurred by the Company, including claims for indemnity or contribution made by third parties against the Company, except to the extent the Company recovers any such losses, liabilities or damages through other provisions of this Agreement.

2.8 Communications and Data Exchange

The DS Supplier and the Company shall supply to each other in a thorough and timely manner all data, materials or other information that is specified in this Agreement, or that may otherwise reasonably be required by DS Supplier or by the Company in connection with the provision of DS Supply by the DS Supplier to DS Customers, if required.

The DS Supplier shall be equipped with the communications capabilities necessary to comply with the communications and data exchange standards that are set by and as may, from time to time, be modified by PJM, and shall exclusively bear the costs of

installing, maintaining, testing, and operating all required information technology systems that will enable it to send to and receive data from the Company and PJM and to satisfy its obligations under this Agreement, the PJM Agreements and all other relevant agreements.

2.9 Record Retention

The Company shall retain necessary records for the longer of two years or as required under applicable PaPUC requirements so as to permit DS Supplier to confirm the validity of payments due to DS Supplier hereunder; provided that if a DS Supplier has provided notice pursuant to this Agreement that it disputes the validity of any payments, the Company agrees that it shall retain all records related to such dispute until the dispute is finally resolved.

2.10 Verification

In the event of a good faith dispute regarding any invoice issued or payment due under this Agreement, and provided that a mutually acceptable confidentiality agreement is executed by the Parties, each Party will have the right to verify, at its sole expense, the accuracy of the invoice or the calculation of the payment due by obtaining copies of relevant portions of the books and records of the other Party.

ARTICLE 3: REPRESENTATIONS AND WARRANTIES

3.1 DS Supplier's Representations and Warranties

The DS Supplier hereby represents, warrants and covenants to the Company on the Effective Date and throughout the term of this Agreement as follows:

- (a) It is a corporation, partnership, limited liability company or other legal entity, duly organized, validly existing and in good standing under the laws of the

Commonwealth of Pennsylvania or, if another jurisdiction, under the laws of such jurisdiction and, in such case, is duly registered and authorized to do business in such other jurisdiction and the Commonwealth of Pennsylvania;

(b) It has all requisite power and authority to execute and deliver this Agreement and to carry on the business to be conducted by it under this Agreement and to enter into and perform its obligations hereunder, including satisfaction of all applicable FERC requirements;

(c) The execution and delivery of this Agreement and the performance of such DS Supplier's obligations hereunder have been duly authorized by all necessary action on the part of the DS Supplier and do not and will not conflict with, or constitute a breach of or default under, any of the terms, conditions, or provisions of the DS Supplier's certificate of incorporation or bylaws or other constituent instruments or any indenture, mortgage, other evidence of indebtedness, or other agreement or instrument or any statute or rule, regulation, order, judgment, or decree of any judicial or administrative body to which the DS Supplier is a party or by which the DS Supplier or any of its properties is bound or subject;

(d) All necessary and appropriate action that is required on the DS Supplier's part to execute this Agreement has been completed;

(e) This Agreement is the legal, valid and binding obligation of the DS Supplier, enforceable in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency or similar laws from time to time in effect that affect creditors' rights in general or by general principles of equity;

(f) There are no actions at law, suits in equity, proceedings or claims pending

or, to the DS Supplier's knowledge, threatened against the DS Supplier before any federal, state, foreign or local court, tribunal or governmental agency or authority that might materially delay, prevent or hinder the DS Supplier's performance of its obligations hereunder;

(g) It has entered into this Agreement with a full understanding of the material terms and risks of the same, and it is capable of assuming those risks;

(h) It is in good standing as an LSE in PJM, is a signatory to all applicable PJM Agreements, and is in compliance with, and will continue to comply with, all obligations, rules and regulations, as established and interpreted by the PJM OI, that are applicable to LSEs as defined by the PJM Agreements; provided that the DS Supplier shall not be obligated to become an LSE in PJM until the date it begins providing DS Supply;

(i) It has made its trading and investment decisions (including regarding the suitability thereof) based upon its own judgment and any advice from such advisors as it has deemed necessary and not in reliance upon any view expressed by the Company;

(j) It will comply with any and all information and data transfer protocols that may be adopted by the Company or that are set by, and from time to time modified by, the PaPUC; provided that DS Supplier shall be entitled to exercise its reserved right to challenge any such protocols in the appropriate forum;

(k) It is not Bankrupt or insolvent and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt or insolvent;

(l) There are no pending or, to its knowledge, threatened, actions, suits or proceedings against it or any of its Affiliates, or any legal proceedings before any

Governmental Authority, that could materially adversely affect its ability to perform its obligations under this Agreement;

(m) No Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;

(n) It is not relying upon the advice or recommendations of the other Party in entering into this Agreement, it is capable of understanding, understands and accepts the terms, conditions and risks of this Agreement, and the other Party is not acting as a fiduciary for or advisor to it in respect of this Agreement; and

(o) It has entered into this Agreement in connection with the conduct of its business and it has the capacity or ability to provide or take delivery of DS Supply as required by this Agreement, and it is an “eligible contract participant” as defined in Section 1a(12) of the Commodity Exchange Act.

3.2 Company’s Representations and Warranties

The Company hereby represents, warrants and covenants to the DS Supplier as follows:

(a) The Company is an electric utility duly organized, validly existing and in good standing under the laws of the Commonwealth of Pennsylvania;

(b) The Company has all requisite power and authority to carry on the business to be conducted by it under this Agreement and to enter into and perform its obligations hereunder;

(c) The execution and delivery of this Agreement and the performance of the Company’s obligations hereunder have been duly authorized by all necessary action on the

part of the Company and do not and will not conflict with, constitute a breach of or default under, any of the terms, conditions, or provisions of the Company's certificate of incorporation or bylaws or any indenture, mortgage, other evidence of indebtedness, or other agreement or instrument or any statute or rule, regulation, order, judgment, or decree of any judicial or administrative body to which the Company is a party or by which the Company or any of its properties is bound or subject;

(d) All necessary and appropriate action that is required on the Company's part to execute this Agreement has been completed;

(e) This Agreement is the legal, valid and binding obligation of the Company, enforceable in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency or similar laws from time to time in effect that affect creditors' rights in general or by general principles of equity and the Commission's power under section 508 of the Public Utility Code, 66 Pa.C.S. § 508, to amend or modify the contracts of public utilities;

(f) The ability of the Company to pay any and all amounts due and payable under this Agreement, or upon any potential breach thereof, is not conditioned upon any governmental or administrative appropriation by the Commission, the Commonwealth of Pennsylvania or any other governmental authority;

(g) There are no actions at law, suits in equity, proceedings or claims pending or, to the Company's knowledge, threatened against the Company before any federal, state, foreign or local court, tribunal or governmental agency or authority that might materially delay, prevent or hinder the Company's performance of its obligations under this Agreement;

(h) It has entered into this Agreement with a full understanding of the material terms and risks of the same, and it is capable of assuming those risks;

(i) The Company's performance under this Agreement is not contingent upon the performance of Customers or the ability of Customers to pay rates;

(j) The Company shall have sole responsibility for metering and billing with respect to Customers; and

(k) The Company shall be responsible for electric distribution services, and the DS Supplier shall not be responsible for distribution charges.

3.3 Survival of Obligations

All representations and warranties contained in this Article are of a continuing nature and shall be maintained during the term of this Agreement or until all amounts due hereunder, including all obligations, have been paid or performed in full. If a Party learns that any of the representations, warranties or covenants in this Agreement are no longer true during the term of this Agreement, the Party shall immediately notify the other Party via facsimile, with a hard copy of the notice delivered by overnight mail. Company, may, in its sole discretion, treat any such materially incorrect or misleading representation or warranty as an Event of Default hereunder.

ARTICLE 4: COMMENCEMENT AND TERMINATION OF AGREEMENT

4.1 Commencement and Termination

The term of this Agreement shall commence upon the Effective Date. Unless otherwise agreed upon by the Company and the DS Supplier, this Agreement shall continue in full force and effect from the Effective Date until the end of all Transaction(s) executed

under this Agreement, unless the Agreement is terminated prematurely pursuant to the provisions of this Agreement.

4.2 Termination of Right to Supply

The DS Supplier agrees that termination of this Agreement for reason of an Event of Default shall terminate any right of the DS Supplier to provide DS Supply and nullify any of the entitlements to which the DS Supplier became entitled as a result of being selected as a winning bidder in the DS Solicitation.

4.3 Survival of Obligations

Termination or expiration of this Agreement for any reason shall not relieve the Company or the DS Supplier of any obligation accrued or accruing prior to such termination. Applicable provisions of this Agreement shall continue in effect after termination to the extent necessary to provide for final billings, including, without limitation, Article 4 (Commencement and Termination of Agreement), Article 5 (Breach and Default), Article 11 (Dispute Resolution), Article 13 (Limitation of Remedies, Liability and Damages), Article 14 (Indemnification), and Article 16 (Miscellaneous Provisions).

4.4 Mutual Termination

The Company and the DS Supplier may agree at any time during the term of this Agreement to terminate their respective rights and obligations hereunder on such terms and under such conditions that they mutually deem to be appropriate as set forth in a mutual termination agreement acceptable in form and substance to the Company and the DS Supplier ("Mutual Termination Agreement"); provided that Company agrees that it shall enter into such a Mutual Termination Agreement, which will discharge the terminating DS

Supplier (the “Terminating DS Supplier”) with respect to liabilities arising after the effective date of the Mutual Termination Agreement if the following conditions precedent are met: (i) the Terminating DS Supplier identifies a replacement DS Supplier willing to assume all obligations of the Terminating DS Supplier hereunder for the remaining term of this Agreement (the “Replacement DS Supplier”); (ii) the Replacement DS Supplier demonstrates its compliance with Article 6 of this Agreement, “Creditworthiness,” as of the effective date of the Mutual Termination Agreement, that determination to be made in the sole discretion of Company; (iii) the Replacement DS Supplier executes a counterpart signature page to this Agreement and thereby becomes a Party under this Agreement, effective immediately following the effective date of the Mutual Termination Agreement; and (iv) the Terminating DS Supplier is not, to the belief or knowledge of the Company, subject to an Event of Default as of the effective date of the Mutual Termination Agreement or, if the Company believes that the Terminating DS Supplier may be subject to an Event of Default, either (a) the Company has determined that, as of the effective date of the Mutual Termination Agreement, it has not incurred any Damages as a result of the Event of Default or (b) if the Company has determined, as of the effective date of the Mutual Termination Agreement, that it may have incurred Damages as a result of the Event of Default, that the Replacement DS Supplier has agreed in writing to be responsible for the payment of such Damages or to otherwise cure the Event of Default, in either case to the satisfaction of the Company in its sole discretion.

ARTICLE 5: BREACH AND DEFAULT

5.1 Events of Default

An Event of Default under this Agreement shall occur if a Party (the “Defaulting

Party”):

- (i) Is the subject of a voluntary bankruptcy, insolvency or similar proceeding;
- (ii) Makes an assignment for the benefit of its creditors;
- (iii) Applies for, seeks consent to, or acquiesces in the appointment of a receiver, custodian, trustee, liquidator or similar official to manage all or a substantial portion of its assets;
- (iv) Is dissolved (other than pursuant to a consolidation, amalgamation or merger) or is the subject of a Merger Event in the case of the DS Supplier;
- (v) Has a secured party take possession of all or substantially all of its assets or has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all of its assets;
- (vi) Has a resolution passed for its winding-up, official management or liquidation (other than pursuant to a consolidation, amalgamation or merger);
- (vii) In the case of a DS Supplier, PJM terminates the DS Supplier’s ability to make purchases from PJM markets or PJM holds the Company responsible for the provision of DS Supply under this Agreement and PJM does not rescind such termination or assignment of responsibility within seven (7) Business Days;
- (viii) Fails to comply with the creditworthiness requirements as set forth in Article 6 of this Agreement, including, without limitation, compliance with the creditworthiness requirements to cover the Margin calculated under Section 6.5 or post any Margin due under Section 6.5 of this Agreement, within the time frames set forth in this Agreement;
- (ix) Is declared by PJM to be in default of any provision of any PJM Agreement,

which default prevents a Party's performance hereunder if such failure is not remedied within three (3) Business Days after written notice;

(x) Fails to make, when due, any payment required pursuant to this Agreement if such failure is not remedied within two (2) Business Days after written notice;

(xi) Violates any federal, state or local code, regulation or statute applicable to the supply of DS Supply (or any constituent thereof such as Energy or AECs) in a manner that materially, and adversely, affects the Party's performance under this Agreement, including by way of failure to continually satisfy all applicable FERC requirements, or, in the case of the DS Supplier, by way of failure to maintain any other governmental approvals required for participation in the Pennsylvania retail Energy market, or defaults on any obligation or other failure to comply with PJM requirements under the PJM Agreements;

(xii) Is the subject of an involuntary bankruptcy or similar proceeding;

(xiii) Subject to Section 5.3(b) of this Agreement, in the case of the Company, fails to accept DS Supply properly tendered by the DS Supplier under this Agreement;

(xiv) Fails to perform any material covenant or obligation set forth in this Agreement, if such failure is not remedied within three (3) Business Days after written notice;

(xv) Makes a materially incorrect or misleading representation or warranty under this Agreement or under any response to the DS Solicitation; or

(xvi) Commits an act or makes an omission that constitutes an "Event of Default" under any other agreement(s) for the provision of DS Supply between the Company and the DS Supplier; and fails to remedy such condition, event or delinquency herein above described such that the other Party (the "Non-Defaulting Party") is completely made whole

with respect to such condition, event or delinquency, within three (3) Business Days of receipt of written notice thereof from such Non-Defaulting Party; provided, however, that an Event of Default shall be deemed to have occurred immediately, without any need for the provision of notice thereof by the Non-Defaulting Party and without any right of cure on the part of the Defaulting Party, in the event of the occurrence of a condition, event or delinquency described in subsections (i), (ii), (iii), (iv), (v), (vi), (vii) or (viii) above. Termination or modification of this Agreement by the PaPUC, other regulatory authority or court of law does not constitute an Event of Default under this Agreement.

(xvii) With respect to the DS Supplier's Guarantor, if any:

1. Representation or warranty made by the Guarantor in connection with this Agreement is false or misleading in any material respect when made or when deemed made or repeated;
2. Guarantor fails to make, when due, any payment required or to perform any other material covenant or obligation in any guaranty made in connection with this Agreement and such failure shall not be remedied within two (2) Business Days after written notice;
3. Guarantor's guaranty fails to be in full force and effect for purposes of this Agreement (other than in accordance with its terms) prior to the satisfaction of all obligations of such Party under this Agreement without the written consent of the other Party; or

4. Guarantor repudiates, disaffirms, disclaims, or rejects, in whole or in part, or challenges the validity of any guaranty.

5.2 Rights upon Default

Upon and during the continuation of an Event of Default, the Non-Defaulting Party shall have the right to suspend performance, provided that such suspension shall not continue for longer than ten (10) Business Days. At any time during or subsequent to the temporary suspension of performance, the Non-Defaulting Party may proceed with the steps outlined in Article 5.7. In addition to any other remedies available at law or in equity to the Non-Defaulting Party, if an Event of Default has occurred and is continuing, the Non-Defaulting Party shall have the right to implement all of the following remedies:

- (i) Declare an Early Termination Date of this Agreement with respect to the obligations of the Defaulting Party without any liability or responsibility whatsoever except for obligations arising prior to the date of termination, by providing written notice to the Defaulting Party; provided, however, that this Agreement shall immediately terminate automatically and without notice in the case of any Event of Default in which a DS Supplier is the Defaulting Party occurring under subsections (i), (ii), (iii), (iv), (v), (vi), (vii) or (viii) of Article 5.1 of this Agreement and such date of automatic termination shall be deemed the Early Termination Date of this Agreement with respect to such Supplier; and
- (ii) Receive Damages in accordance with Section 5.3 of this Agreement.

The Non-Defaulting Party shall be entitled to elect or pursue one or more of the above remedies.

5.3 Damages Resulting from an Event of Default

- (a) **DS Supplier's Failure to Supply DS Supply or Declaration of Early**

Termination By Company: Damages resulting from (i) the DS Supplier's failure to (A) provide DS Supply in conformance with Article 2.2 hereof or (B) pay PJM for purchases of any products or services from PJM, or other failure to comply with PJM requirements, such that PJM holds the Company responsible for the provision of DS Supply to meet the DS Supplier's DS Supplier Responsibility Share under this Agreement or (ii) the occurrence of any Event of Default attributable to the DS Supplier resulting in Early Termination, shall include all Costs incurred by the Company, acting in a commercially reasonable manner consistent with any statutory or regulatory requirements imposed by the Applicable Legal Authorities, in obtaining replacement services and/or in obtaining a replacement supplier, which Costs exceed the amounts that would have been payable to the defaulting DS Supplier under this Agreement. Costs incurred by the Company for the purpose of calculating Damages hereunder will consist of:

(i) The cost of DS Supply allocated to the Company by the PJM OI due to the failure of the DS Supplier to meet obligations owing to the PJM OI in connection with its obligations under this Agreement;

(ii) The costs of DS Supply purchased by the Company to replace DS Supply that a DS Supplier was obligated to supply under this Agreement during the term hereof;

(iii) Administrative and legal costs associated with procuring replacement DS Supply; and

(iv) Financial hedging costs incurred by the Company on behalf of DS Customers as a result of having to procure DS Supply not provided by the DS Supplier.

The Parties further recognize and agree that the final calculation of Damages hereunder may not be known for some time since the level of such Damages may be

dependent upon the arrangements made by the Company to obtain replacement services or a replacement DS Supplier. The Company and the DS Supplier agree that, until the calculation of Damages under this provision is completed, the amount and payment to the Company of the Settlement Amount on behalf of DS Customers in the event of an Early Termination as set forth in Article 5.4 of this Agreement shall be immediately due and owing as an estimate of all Damages ultimately determined to be due and owing. After Damages have been finally determined under this Article 5.3, the amounts of Damages due and owing will be reconciled with payments already made by the DS Supplier under Section 5.4 of this Agreement.

(b) Failure by Company on Behalf of Customers to Accept DS Supply Properly Tendered by DS Supplier: Damages resulting from the failure of the Company on behalf of Customers to accept DS Supply properly tendered by the DS Supplier necessary to meet the DS Supplier Responsibility Share of DS Load under this Agreement shall consist of the positive difference (if any) between (i) the amounts that would have been payable to the DS Supplier hereunder had the Company accepted the DS Supply properly tendered by the DS Supplier necessary to meet the DS Supplier Responsibility Share of DS Load under this Agreement and (ii) the amount realized by the DS Supplier in disposing, in a commercially reasonable manner, of the DS Supply not accepted by the Company; provided, however, that the Company shall not be liable for any Damages if this Agreement is terminated, or modified so as to frustrate or effectively preclude Company's acceptance of the DS Supply, by the PaPUC, other regulatory authority or a court of law.

(c) Damages Resulting from Early Termination Due to an Event of Default Attributable to the Company: Damages resulting from Early Termination due to an

Event of Default attributable to the Company shall be as set forth in Section 5.4 of this Agreement. Damages calculated in accordance with said Article 5.4 shall be the exclusive remedy available to the DS Supplier in the event of Early Termination resulting from an Event of Default attributable to the Company.

(d) Damages Resulting from DS Supplier's Failure to Continuously Satisfy its Obligations Associated with the AEPS: Damages resulting from the DS Supplier's failure to continuously meet and satisfy all or any portion of its obligations under Section 2.2 (a)(viii) of this Agreement shall include, but not be limited to, the amount of all penalties (including Alternative Compliance Payments), costs associated with the procurement of additional AECs, etc., including, without limitation, interest and other charges, if any, levied against the Company related to AEPS regulations, due to such DS Supplier's conduct or inaction. DS Supplier has a specific obligation to provide the AECs conforming to PaPUC requirements and not money damages in substitution. Therefore, any such attempt to supply money damages instead of AECs may be treated as an event of default in the sole discretion of Company.

(e) Other Damages: Damages for Events of Default not specified above shall consist of the direct Damages incurred by the Non-Defaulting Party.

(f) Waiver of Event of Default: If an Event of Default has occurred and the Non-Defaulting Party is the Company, then unless the Event of Default was a failure by the DS Supplier to meet any or all of its DS Supply obligations, the Company may elect, at its sole discretion, to offer to waive the default on such terms and conditions as the Company, at its sole discretion, may deem appropriate to propose a special remedy. Any such special remedy can only be offered to the DS Supplier if it first is specifically

approved by the PaPUC in accordance with Commission Orders.

5.4 Declaration of an Early Termination Date and Calculation of Settlement Amount and Termination Payment

(a) Settlement Amount

If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the Non-Defaulting Party shall have the right (i) to designate a day, no earlier than the day such notice is effective and no later than twenty (20) days after such notice is effective, as a date for Early Termination (“Early Termination Date”) to accelerate all amounts owing between the Parties and to liquidate and terminate the undertakings set forth in this Agreement, (ii) to withhold any payments due to the Defaulting Party under this Agreement, and (iii) to suspend performance; provided, however, that an Early Termination Date shall be deemed to occur automatically and concurrently with the Event of Default, without any requirement for the provision of notice by the Non-Defaulting Party, with respect to an Event of Default under subsections (i), (ii), (iii), (iv), (v), (vi), (vii), and (viii) of Article 5.1 of this Agreement. The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount with respect to the obligations under this Agreement.

The DS Supplier may, in its sole discretion, add the following subsection 5.4(a)(i) by checking this box. If DS Supplier does not check this box, subsection 5.4(a)(i) will be deemed to be excluded from this Agreement.”

- (i) For the purposes of such determination, the DS Supply provided for under this Agreement for the period following the Early Termination Date through the remainder of the term of this Agreement shall be deemed to be those quantity amounts that would have been delivered on an hourly basis, had this Agreement been in effect during the previous calendar year adjusted for such DS Load changes

as may have occurred since the previous calendar year.

(b) Net Out of Settlement Amounts

The Non-Defaulting Party shall calculate a Termination Payment by aggregating all Settlement Amounts due under this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply into a single amount by netting out (a) all Settlement Amounts that are due or will become due to the Defaulting Party, plus at the option of the Non-Defaulting Party, any cash or other form of security then available to the Non-Defaulting Party and actually received, liquidated and retained by the Non-Defaulting Party, plus any or all other amounts due to the Defaulting Party under this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply against (b) all Settlement Amounts that are due or will become due to the Non-Defaulting Party, plus any or all other amounts due to the Non-Defaulting Party under this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply, so that all such amounts shall be netted out to a single liquidated amount; provided, however, that if the DS Supplier is the Defaulting Party and the Termination Payment is due to the DS Supplier, the Company shall be entitled to retain a commercially reasonable portion of the Termination Payment, which may be equal to the entire amount of the Termination Payment, as security for additional amounts that may be determined to be due and owing by the DS Supplier as Damages and further provided that any previously attached security interest of the Company in such retained amounts shall continue. The Termination Payment shall be due to or due from the Non-Defaulting Party as appropriate. If the Termination Payment has been retained by the Company as security for additional amounts that may be determined

to be due and owing by the DS Supplier, and if, upon making a final determination of Damages, the Termination Payment, or any portion thereof, is to be made to the DS Supplier, the Company will pay simple interest on the Termination Payment amount being made to the DS Supplier. Simple interest will be calculated at the lower of the Interest Index or six (6) percent per annum.

(c) Notice of Termination Payment

As soon as practicable after calculation of a Termination Payment, notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to or due from the Non-Defaulting Party. The notice shall include a written statement explaining in reasonable detail the calculation of such amount. Subject to Article 5.4(b) above, the Termination Payment shall be made by the Party that owes it within three (3) Business Days after such notice is effective.

(d) Disputes With Respect to Termination Payment

If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within three (3) Business Days of receipt of Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute; provided, however, that if the Termination Payment is due from the Defaulting Party, the Defaulting Party shall first transfer collateral to the Non-Defaulting Party in an amount equal to the Termination Payment, such collateral to be in a form acceptable to the Non-Defaulting Party as specified in the Termination Payment Dispute Notice.

(e) Multiple DS Supply Agreements

It is the intention of the Company and the DS Supplier that, in the event the DS Supplier is a party to other agreements with the Company for the provision of DS Supply that existed prior to the Effective Date of this Agreement or are entered into after the Effective Date of this Agreement, the Company will calculate a single Termination Payment applicable to all such agreements as set forth herein.

5.5 Step-up Provision

The Company may ask other DS Suppliers whether they wish to assume all or part of the delivery obligations on the same terms and price contained herein, but any DS Supplier shall not be obligated to assume any such step-up requests. Any agreement to make additional supply available shall be termed a "Step-Up," and is subject to compliance with the creditworthiness provisions of Article 6 of this Agreement and the DS Supplier's load cap as per the Company's approved default service procurement plan. For the avoidance of doubt, in the event that the DS Supplier does not respond to the Company's Step-Up request within the relevant timeframe, then the DS Supplier shall be deemed to have rejected the Company's request in full.

5.6 Setoff of Payment Obligations of the Non-Defaulting Party

Any payment obligations of the Non-Defaulting Party to the Defaulting Party pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply shall be set off: (i) first, to satisfy any payment obligations of the Defaulting Party to the Non-Defaulting Party pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply that are unsecured and not subject to any Guaranty; (ii) second, to satisfy any

payment obligations of the Defaulting Party to the Non-Defaulting Party pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply that are unsecured, but which are subject to a Guaranty; and (iii) third, to satisfy any remaining payment obligations of the Defaulting Party to the Non-Defaulting Party pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply.

5.7 Preservation of Rights of Non-Defaulting Party

The rights of the Non-Defaulting Party under this Agreement, including without limitation Articles 5.4 and 5.7 of this Agreement, shall be supplemental to, and not in lieu of, any right of recoupment, lien, or set-off afforded by applicable law, and all such rights are expressly preserved for the benefit of the Non-Defaulting Party.

- (a) Duty to Mitigate. Each Party agrees that it has a duty to mitigate damages and covenants that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's failure to perform pursuant to this Agreement.

- (b) Return of Auction Revenue Rights. When the DS Supplier is the Defaulting Party, the DS Supplier will make best efforts to facilitate the transfer or reassignment to the entity which is the replacement DS Supplier on the Early Termination Date, any and all of the replacement DS Supplier's rights to Auction Revenue Rights (ARRs) to which the replacement DS Supplier is entitled as a LSE pursuant to the PJM Agreements, which were transferred or assigned to the DS Supplier under Section 2.3 (Congestion and Congestion Management).

ARTICLE 6: CREDITWORTHINESS**6.1 Applicability**

The DS Supplier agrees that it shall meet the creditworthiness requirements of this Article 6 at all times during the term of this Agreement and shall inform the Company immediately of any changes in its credit rating or financial condition. Without limitation of the foregoing, the DS Supplier shall, upon written request, affirmatively demonstrate to the Company, its compliance with the creditworthiness requirements set forth hereunder. The Company may establish less restrictive creditworthiness requirements under this Article 6 in a non-discriminatory manner.

6.2 Creditworthiness Determination

The DS Supplier may submit and maintain a security deposit in accordance with Section 6.4 of this Agreement in lieu of submitting to or being qualified under a creditworthiness evaluation. The DS Supplier shall have the opportunity to request that the Company re-evaluate its creditworthiness whenever an event occurs that the DS Supplier believes would improve the determination made by the Company of its creditworthiness. The Company's credit re-evaluation must be completed as soon as practicable but no longer than thirty (30) days after receiving a fully documented request. The Company must provide the rationale for its determination of the credit limit and any resulting security requirement. The Company must perform its credit re-evaluation and associated security calculation in a non-discriminatory manner. DS Supplier shall provide the Company and its agents unrestricted access to most recent audited financial statements; provided that if current audited financial statements are not available, the Company, in its sole discretion, may specify other types of financial statements that will be accepted.

6.3 Mark-to-Market Credit Exposure Methodology

To calculate the daily exposure for each DS Supplier, the MtM credit exposure methodology will be used. The “mark” for each Billing Month will be determined at the time the auction is completed based on the available Forward Market Prices, and for the remaining Billing Months, it will be derived based on historical data. At the time the auction is completed, the MtM credit exposure for each DS Supplier shall be equal to zero. Subsequently, the differences between the available Forward Market Prices on the valuation date and the “mark” prices for the corresponding Billing Months will be used to calculate the daily credit exposures for each DS Supplier. The total MtM credit exposure will be equal to 1.1 times the sum of the MtM credit exposures for each Billing Month. The methodology for calculation of the MtM credit exposure is illustrated in the example (using hypothetical numbers) set forth in Appendix B hereto.

6.4 Credit Limit

The following criteria constitute the Company’s creditworthiness requirements for the DS Supplier, to cover the Total Exposure Amount. In all instances, the most current senior unsecured debt rating (or, if unavailable, the most current corporate issuer rating) will be used.

(i) For a DS Supplier to be granted an unsecured line of credit, the DS Supplier must be rated by at least two of the following rating agencies: S&P, Moody’s, or Fitch. The methodology for determining the credit rating to use is set forth in Appendix A of this Agreement. The Maximum Credit Limit to cover the Total Exposure Amount will be determined based on the credit matrix table in Appendix A of this Agreement.

The DS Supplier will be required to post cash or a letter of credit in an acceptable

form as defined in Section 6.7 (b) of this Agreement (see standard format in Exhibit 4) for the Margin due the Company as set forth in Section 6.5 of this Agreement;

(ii) For a DS Supplier having a Guarantor, in the case of a Guarantor organized under the laws of the United States, the Guarantor (1) must be rated by at least two of the following rating agencies: S&P, Moody's, or Fitch, and (2) must have a minimum senior unsecured debt rating (or, if unavailable, corporate issuer rating) equal to the Minimum Rating. If the Guarantor is rated by only two rating agencies, and the ratings are split, the rating will be established based on the methodology outlined in Appendix A of this Agreement. The Maximum Credit Limit to cover the Total Exposure Amount that could be provided through the Guaranty (see standard format in Exhibit 5) will be determined based on the credit matrix table for Guarantors in Appendix A. The DS Supplier will be granted a credit limit equal to the lesser of (i) the amount of the Guaranty as provided to the Company at the time this Agreement is executed as such amount may be modified in any amended or substitute Guaranty provided to the Company during the term of this Agreement, or (ii) the Supplier's Maximum Credit Limit. The DS Supplier, however, may not increase or substitute its Guaranty for the purpose of increasing its applicable credit limit during the time period after the Company has made a Margin call but before the DS Supplier has posted the required Margin. Notwithstanding anything herein to the contrary, the DS Supplier may increase the limit of its Guaranty after satisfying a Margin call from the Company and upon the Company's receipt of an amended or substitute Guaranty increasing the limit of the Guaranty, the DS Supplier may request a return of Margin in accordance with Section 6.5 of this Agreement. The DS Supplier will be required to post cash or a letter of credit in an acceptable form as defined in Section 6.7(b) of this

Agreement (see standard format in Exhibit 4) for the Margin due the Company as set forth in Section 6.5 of this Agreement; or

(iii) For a DS Supplier or Guarantor that has not been incorporated or otherwise formed under the laws of the United States and whose financial data is not denominated in United States currency and does not conform to generally accepted accounting principles (“GAAP”) in the United States, the DS Supplier or Guarantor shall meet all requirements of Sections 6.4(i) and (ii) of this Agreement and shall supply the following additional information:

- a. A legal opinion of counsel qualified to practice in the foreign jurisdiction in which the DS Supplier or Guarantor is incorporated or otherwise formed that this Agreement is, or upon completion of execution formalities will become, the binding obligation of the DS Supplier or Guarantor in the jurisdiction in which it has been incorporated or otherwise formed;
- b. The sworn certificate of the corporate secretary (or similar officer) of such DS Supplier or Guarantor that the person executing this Agreement on behalf of the DS Supplier has the authority to execute the Agreement and that the governing board of the DS Supplier or Guarantor has approved the execution of this Agreement;
- c. The sworn certificate of the corporate secretary (or similar officer) of such DS Supplier or Guarantor that the DS Supplier or Guarantor has been authorized by its governing board to enter into agreements of the same type as this Agreement; and

d. Such other documents and certificates as may be required by the Company in its sole discretion.

(iv) The posting of cash or a letter of credit as defined in Section 6.7 (b) below for the entire Total Exposure Amount as set forth in Section 6.5 of this Agreement.

6.5 Posting Margin and Return of Surplus Margin

(a) If at any time and from time to time during the term of this Agreement the Total Exposure Amount, rounded up by the Rounding amount, exceeds the DS Supplier's or the Guarantor's credit limit by the Minimum Transfer Amount (MTA), then the Company, on any Business Day, may request that the DS Supplier provide cash or a letter of credit in an acceptable form as defined in Article 6.7(b) of this Agreement (see standard format in Exhibit 4), in an amount equal to the Margin (less any Margin posted by the DS Supplier and held by the Company pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply).

If the DS Supplier receives written notice for Margin from the Company by 1:00 p.m. New York time on a Business Day, then the DS Supplier shall post Margin the next following Business Day, if posting cash, and by the second Business Day following the date of notice, if posting a letter of credit, unless the Company agrees in writing to extend the period to provide Margin. If the DS Supplier receives notice for Margin from the Company after 1:00 p.m. New York time on a Business Day, whether posting cash or a letter of credit, then the DS Supplier must post Margin the second Business Day following the date of notice unless the Company agrees in writing to extend the period to provide Margin. The Company will not unreasonably deny a request for a one-day extension of such period. In the event that the DS Supplier fails to post Margin when due in accordance

with this Article 6.5, then an Event of Default under Article 5 of this Agreement will be deemed to have occurred and the Company will be entitled to the remedies set forth in Article 5 of this Agreement.

(b) Surplus Margin being held by the Company that is not needed to satisfy the Total Exposure Amount, as determined above, will be returned to the DS Supplier upon receipt of a written request by the DS Supplier. Surplus Margin means cash or a letter of credit posted by the DS Supplier as a result of a request by the Company pursuant to Article 6.5(a) that exceeds the Total Exposure Amount less the DS Supplier's or the Guarantor's credit limit (rounded up by the Rounding Amount). If the resulting Surplus Margin amount is more than the Minimum Transfer Amount, it will be returned to the DS Supplier. If the DS Supplier posted cash and notice is received by 1:00 p.m. New York time on a Business Day, the surplus Margin will be returned by the next following Business Day and if the DS Supplier posted cash and notice is received by the Company after 1:00 p.m. New York time on a Business Day, the surplus Margin shall be returned by the second Business Day following the date of notice, unless the DS Supplier agrees in writing to extend the period to return the surplus Margin. If the DS Supplier posted a letter of credit, the surplus Margin shall be returned on the next Business Day following the Business Day on which the amendment to the letter of credit is received from the issuing bank, unless the DS Supplier agrees in writing to extend the period to return the surplus Margin. The DS Supplier will not unreasonably deny a request for a one-day extension of such period. In the event that the Company fails to return the surplus Margin when due in accordance with this Article, then an Event of Default under Article 5 of this Agreement will be deemed to have occurred and the DS Supplier will be entitled to the remedies set forth in Article 5 of this Agreement.

6.6 Grant of Security Interest/Remedies

To secure its obligations under this Agreement and to the extent that the DS Supplier posted Margin/collateral hereunder, the DS Supplier hereby grants to the Company a present and continuing security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, the Company, and the DS Supplier and the Company agree to take such action as is reasonably required to perfect the secured Party's first priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, the Company may do any one or more of the following: (i) exercise any of the rights and remedies of the Company with respect to all collateral, including any such rights and remedies under law then in effect; (ii) exercise its rights of setoff against any and all property of the DS Supplier in the possession of the Company, whether held in connection with this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply; (iii) draw on any outstanding letter of credit issued for its benefit; and (iv) liquidate all security held by or for the benefit of the Company free from any claim or right of any nature whatsoever of the DS Supplier, including any equity or right of purchase or redemption by the DS Supplier. The Company shall apply the proceeds of the collateral realized upon the exercise of such rights or remedies to reduce the DS Supplier's obligation under this Agreement or any other agreement(s) between the Company and the DS Supplier for the

provision of DS Supply (the DS Supplier remaining liable for any amounts owing to the Company after such application), subject to the Company's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

All notices, demands or requests regarding credit requirements and credit related security or deposit transfers shall be in writing and shall be personally delivered or sent by overnight express mail, courier service or electronic mail transmission (with the original transmitted by any of the other aforementioned delivery methods, unless agreed to otherwise by the parties) addressed as follows:

If to a DS Supplier to:

Copy to:

If to the Company to: James H. Milligan, Treasurer

Duquesne Light Company

Mail Drop 7-3

411 Seventh Avenue, Pittsburgh, PA 15219

jmilligan@duqlight.com

Copy to: Energy Procurement

Mail Drop 15-1

Duquesne Light Company

411 Seventh Avenue, Pittsburgh, PA 15219

energysupply@duqlight.com

Notice received after the close of the Business Day shall be deemed received on the next Business Day; provided that notice by electronic mail transmission shall be deemed to have been received by the recipient if the recipient confirms receipt telephonically, in writing, or by responding in the same electronic mail conversation chain.

6.7 Security Instruments

At each DS Supplier's choice, the following are deemed to be acceptable methods for posting security, if required:

(a) Cash; or

(b) A standby irrevocable letter of credit acceptable to the Company, in its sole discretion, issued by a domestic bank (or a domestic branch of an international bank) or other domestic financial institution (or a domestic branch of an international financial institution) with a minimum "A-" senior unsecured debt rating (or, if unavailable, equivalent corporate issuer rating) from S&P or Fitch and "A3" from Moody's (see standard format in Exhibit 4). The letter of credit shall state that it shall renew automatically for successive one-year or shorter periods, until terminated upon at least ninety (90) days prior written notice from the issuing financial institution. If the Company receives notice from the issuing financial institution that the letter of credit is being cancelled, the DS Supplier will be required to provide a substitute letter of credit from an alternative bank satisfying the minimum requirements. The receipt of the substitute letter of credit must be effective as of the cancellation date and delivered to the Company thirty (30) days before the cancellation date of the original letter of credit. If the DS Supplier fails to supply a substitute letter of credit as required, then the Company will have the right to draw on the existing letter of credit and to hold the amount as Margin.

If the credit rating of a bank or other financial institution from which a DS Supplier has obtained a letter of credit falls below the levels specified in Article 6 of this Agreement, the DS Supplier shall have two (2) Business Days following written notice by the Company to obtain a suitable letter of credit from another bank or other financial institution that

meets those standards, unless such period is extended in writing by the Company. The Company shall have no obligation under this Agreement or otherwise to make or grant such extension.

6.8 Maintenance of Creditworthiness

(a) Reporting of Changes

The DS Supplier shall promptly notify the Company of any change in its credit rating or financial condition or that of its Guarantor. The DS Supplier or Guarantor shall also furnish evidence of an acceptable credit rating or financial condition upon the request of the Company.

(b) Change in Credit Standing

The Company will re-evaluate the creditworthiness of a DS Supplier whenever it becomes aware of an adverse change, through the provision of notice by the DS Supplier or otherwise, in the DS Supplier's or Guarantor's credit standing. If the lowest credit rating (whether senior unsecured debt rating or corporate issuer rating) used to determine the DS Supplier's Maximum Credit Limit or its credit limit adversely changes, the Company will require additional security from the DS Supplier in accordance with Sections 6.4 of this Agreement. The additional security must be in a form acceptable to the Company in its sole discretion, as specified in Article 6.7 of this Agreement and must be posted as set forth in Section 6.5 of this Agreement.

6.9 Calling on Security

The Company may call upon the security posted by the DS Supplier if the DS Supplier fails to pay amounts due to the Company pursuant to this Agreement or any other agreement(s) between the Company and the DS Supplier for the provision of DS Supply

after all of the following events occur:

- (a) Written Notice of Default is provided to the DS Supplier; and
- (b) Any applicable cure period associated with the written Notice of Default ends.

The foregoing notwithstanding, the security posted by the DS Supplier shall become due automatically without prior notice or right of cure in the case of any Event of Default arising under subsections (i), (ii), (iii), (iv), (v), (vi), (vii) and (viii) of Section 5.1 of this Agreement.

6.10 Interest on Cash Held by Company

The Company will pay simple interest calculated at the lower of the Interest Index or six (6) percent per annum on all cash held by the Company pursuant to this Agreement. Each Billing Month, the Company will prepare a statement of interest amounts due to the DS Supplier. The statement will be sent to the DS Supplier within three (3) Business Days after the end of the Billing Month via overnight mail or other expeditious means. The Company shall make interest payments on the first Business Day after the 5th day of each calendar month.

6.11 No Endorsement of DS Supplier

The Company's determination that a DS Supplier is creditworthy pursuant to the process set forth above, shall not be deemed to constitute an express or implied warranty or guarantee of any kind with respect to the financial or operational qualifications of the DS Supplier. The Company will treat all DS Suppliers in a non-discriminatory manner and shall provide no preference to any DS Supplier.

6.12 Multiple DS Supply Agreements

It is the intention of the Company and the DS Supplier that, in the event the DS Supplier is a party to other agreements with the Company for the provision of DS Supply that existed prior to the effective date of this Agreement or is entered into after the effective date of this Agreement, the Company will calculate the Margin applicable to all such agreements as set forth in Appendix A of this Agreement; provided, however, that if another agreement has a more stringent credit threshold, then the more stringent credit threshold shall apply. Each DS Supplier that is a party to such other agreements with the Company for the provision of DS Supply hereby agrees that such other agreements are deemed amended by this Agreement for the purpose of calculating the Margin as described herein.

ARTICLE 7: PROCEDURES FOR ENERGY SCHEDULING, CAPACITY RESOURCE SUBMISSION AND TRANSMISSION PROCUREMENT

7.1 Load Obligations

The Company and the DS Supplier acknowledge and agree that (1) the Company shall determine the DS Load, (2) the Company shall allocate the DS Supply obligation using the DS Supplier Responsibility Share, (3) the Company shall provide the DS Supplier's DS Supply obligation to PJM, and (4) the DS Supplier shall be responsible for meeting its DS Supply obligations as a LSE under the PJM Agreements.

7.2 Data Transmission

The procedures for transmitting load obligation data to PJM for DS Supplier's DS Load shall be as set forth by PJM.

7.3 Energy Scheduling

The Company is not obligated to provide any day ahead scheduling services. If the Company chooses to provide such services, the information provided is not guaranteed by the Company.

ARTICLE 8: THE ENERGY SETTLEMENT/RECONCILIATION PROCESS

8.1 Energy Settlement by PJM

The settlement process occurs at PJM to reflect the DS Supplier's actual Energy obligations in a supply/usage reconciliation process. The Energy obligations for each DS Supplier will be determined based on the DS Supplier Responsibility Share of the DS Load. The reconciled total DS Energy obligation will be based on the final total Energy loads for the Customers receiving DS service, including de-rating adjustments for marginal losses.

Any adjustments for billing and metering errors reported subsequent to the calculation of FMEA will be proportionally allocated by the Company to the DS Suppliers based on the respective DS Supplier Responsibility Share.

8.2 Energy Settlement by the Company

In the event that actual DS Customer consumption data is not available until after the PJM deadline for conducting the final settlement, the Company will conduct the settlement process with the DS Supplier. In the event PJM imposes penalties against the Company as a result of the DS Supplier's Transactions or failure to meet PJM requirements, such penalties shall be passed through by the Company to the DS Supplier as part of this settlement process. In addition, all other applicable charges from PJM, including any billing adjustments, will be appropriately allocated to the DS Supplier.

ARTICLE 9: BILLING AND PAYMENT

9.1 The Company Payment of Obligations to the DS Supplier

The Company shall pay all amounts due to the DS Supplier hereunder in accordance with the following provisions:

(a) Each Billing Month, the Company will prepare a Statement of amounts due to the DS Supplier.

- For Fixed Price Transactions, this Statement will show the aggregate amounts due based on the DS Fixed Price multiplied by the hourly Energy requirements of DS Supply used to determine the PMEA multiplied by the DS Fixed Percentage as shown in Appendix C for each hour of the Billing Month.
- For Hourly Price Transactions, this Statement will show the aggregate amounts due based on the DS Fixed Price Adder For Hourly Price Service multiplied by the hourly Energy requirements of DS Supply used to determine the PMEA multiplied by the DS Fixed Percentage as shown in Appendix C for each hour of the Billing Month, plus the DS Variable Payments used to determine the PMEA for each hour of the Billing Month.

(b) The Statement will be sent to the DS Supplier within eight (8) Business Days after the end of the Billing Month via overnight mail or other expeditious means.

(c) The Company shall make payment on the first Business Day after the 19th day of each calendar month.

(d) To the extent that the FMEA differs from the PMEA, the Company shall pay or charge the DS Supplier for the PMEA/FMEA Adjustment Amount within the PJM deadline for conducting the final settlement.

(e) If each Party owes an amount to the other Party pursuant to this Agreement, including any related interest, payments or credits, the Parties may satisfy their respective obligations to each other by netting the aggregate amounts due to one Party against the aggregate amounts due to the other Party, with the Party, if any, owing the greater aggregate amount paying the other Party the difference between the amounts owed.

(f) Payments shall be subject to adjustment for any arithmetic errors, computation errors, meter reading errors, or other errors, provided that the errors become known within one (1) year of the termination of this Agreement.

(g) The Company shall make payments of funds payable to the DS Supplier by electronic transfer to a bank designated by the DS Supplier.

(h) If a good faith dispute arises between the Company and the DS Supplier regarding a Statement, the disputing Party shall be obligated to pay only the undisputed portion of the Statement, if any, and shall present the dispute in writing and submit supporting documentation to the non-disputing Party within one hundred twenty (120) calendar days from the date of the Statement in dispute. Statement disputes shall be addressed promptly and in accordance with the dispute resolution procedures set forth in Article 11 of this Agreement. Upon resolution of a Statement dispute, any payments made to either Party will include simple interest on the payment at the lower of the Interest Index or six (6) percent per annum payable from the date that notice of a Statement dispute was received by the non-disputing Party.

(i) If payment is made to the DS Supplier after the due date shown on the Statement, a late fee will be added to the unpaid balance until the entire Statement is paid. This late fee shall be the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in The Wall Street Journal under "Money Rates" on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) or (b) the maximum rate permitted by applicable law.

(j) If Seller does enter more than one transaction with Buyer, Buyer may provide a single invoice listing the relevant information detailed.

9.2 Billing for DS Supplier's Obligations to Other Parties

The Company shall have no responsibility for billing between the DS Supplier and PJM; the DS Supplier and any Energy or Capacity source; or the DS Supplier and any other third party. The Company will be solely responsible for billing DS Customers for Default Service.

9.3 The DS Supplier Payment of Obligations to the Company

The DS Supplier shall pay all Charges it incurs hereunder in accordance with the following provisions:

(a) Each Billing Month, the Company shall submit an invoice to the DS Supplier for all Charges owed by the DS Supplier under this Agreement. The DS Supplier shall make payment for Charges shown on the invoice. The due date will be on the first Business Day after the 19th day of each calendar month. The invoice will be sent to the DS Supplier within eight (8) Business Days after the end of the Billing Month via overnight mail or other expeditious means.

(b) Invoices shall be subject to adjustment for any arithmetic errors, computation errors, meter reading errors, or other errors, provided that the errors become known within one (1) year of the termination of this Agreement.

(c) The DS Supplier shall make payments of funds payable to the Company by electronic transfer to a bank designated by the Company.

(d) If a good faith dispute arises between the Company and the DS Supplier regarding an invoice, the disputing Party shall pay only the undisputed portion of the invoice, if any, and shall present the dispute in writing and submit supporting documentation to the non-disputing Party within one hundred twenty (120) calendar days from the due date of the invoice in dispute. Billing disputes shall be addressed promptly, and in accordance with the dispute resolution procedures set forth in Article 11 of this Agreement. Upon resolution of a billing dispute, any payments made to either Party will include simple interest on the payment at the lower of the Interest Index or six (6) percent per annum payable from the date that notice of a bill dispute was received by the non-disputing Party.

(e) If payment is made to the Company after the due date shown on the invoice, a late fee will be added to the unpaid balance until the entire invoice is paid. This late fee shall be the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in The Wall Street Journal under "Money Rates" on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) or (b) the maximum rate permitted by applicable law.

ARTICLE 10: SYSTEM OPERATION

The Parties shall adhere to any applicable operational requirements of PJM necessary to protect the integrity of the transmission system within the PJM Control Area and the transmission systems of interconnected control areas, and shall satisfy any and all PJM, RFC and NERC criteria, when applicable. The DS Supplier shall also adhere to any applicable operational requirements of the Company necessary to protect the integrity of the Company's local distribution system.

10.1 Disconnection and Curtailment by the Company

The Company shall have the right, without incurring any liability to the DS Suppliers, to disconnect (or otherwise curtail, interrupt or reduce deliveries from) the DS Suppliers or to disconnect (or otherwise curtail, interrupt or reduce deliveries to) any Customer whenever the Company determines in the exercise of its good faith discretion, or when the Company is directed by PJM, that such a disconnection, curtailment, interruption or reduction is necessary to facilitate construction, installation, maintenance, repair, replacement or inspection of any of the Company's facilities, or due to any other reason affecting the safe and reliable operation of the Company's or a Customer's facilities, including, without limitation, an Emergency, forced outage or potential overloading of the Company's transmission and/or distribution circuits, potential damage to any Customer's facilities or any risk of injury to persons or property.

10.2 Inadvertent Loss of Service to DS Customers

The Parties agree and acknowledge that service to DS Customers may be inadvertently lost due to storms, weather, accidents, breakage of equipment or other events beyond the reasonable control of the Company affecting the transmission and distribution

system of the Company. Neither Party will have any liability to the other Party for the occurrence of such events except for the Company's obligation to pursue steps for the resumption of the disrupted service as set forth in Section 10.3 below. In no event will an inadvertent loss of service affect a Party's obligation to make any payments then due or becoming due with respect to performance rendered prior to such inadvertent loss of service.

10.3 Good Faith Efforts

The Company shall use good faith efforts to minimize any curtailment, interruption or reduction in service to DS Customers to the extent reasonably practicable under the circumstances.

10.4 PJM Requirements

The DS Supplier acknowledges and agrees that, as a member of PJM, the Company is bound by all PJM operating instructions, policies and procedures as are currently set forth in the PJM Operating Manual, which are available through the Internet on the PJM Home Page (<http://www.pjm.com>), as may be revised from time to time, which are needed to maintain the integrity of the PJM system. The DS Supplier acknowledges and agrees that it will cooperate with the Company so that the Company will be in compliance with all PJM Emergency Operations Procedures, which include, but are not limited to, those procedures pertaining to minimum and maximum generation Emergencies, and measures requiring involuntary Customer participation, such as supply voltage reduction or full interruption of Customer load by either manual or automatic means.

10.5 Compliance with Governmental Directives

The DS Supplier also acknowledges and agrees that the Company may need to act

in response to governmental or civil authority directives which may affect DS Customer load. The DS Supplier agrees to cooperate with the Company in order to comply with said directives.

ARTICLE 11: DISPUTE RESOLUTION

11.1 Informal Resolution of Disputes

Before pursuing resolution of any dispute arising out of this Agreement (other than an Event of Default under Article 5.1(i)-(ix), (xii), or (xvi)), the disputing Party shall provide written notice to the other Party setting forth the nature of the dispute, the amount involved, if any, and the remedies sought. The Parties shall use good faith and reasonable commercial efforts to informally resolve such dispute. Such efforts shall last for a period of at least thirty (30) calendar days from the date that the notice of the dispute is first delivered from one Party to the other Party. Any amounts that are owed by one Party to the other Party as a result of resolution of a dispute pursuant to this Article 11.1 (Informal Resolution of Disputes), shall be paid within two (2) Business Days of such resolution and the payment shall include interest calculated at the Interest Index from the original due date through the date of payment.

11.2 Recourse to Agencies or Courts of Competent Jurisdiction

After the requirements of Article 11.1 (Informal Dispute Resolution) have been satisfied, all unresolved disputes, except as noted below, between the Parties shall be submitted to the appropriate authority. Nothing in this Agreement shall restrict the rights of either Party to file a complaint with the FERC under relevant provisions of the Federal Power Act ("FPA"), with the PaPUC under relevant provisions of the Applicable Legal Authorities, with the Allegheny County Court of Common Pleas or with the Western

District of Pennsylvania Federal Court. The Party's agreement hereunder is without prejudice to any Party's right to contest the jurisdiction of the agency or court to which a complaint is brought.

The Parties hereby acknowledge and agree that both Parties have negotiated and entered into this Agreement freely and in good faith and that the terms of this Agreement have not been affected in any way, either directly or indirectly, by (A) any fraud, duress, unfairness, or any inequity in the relative bargaining power of the Parties or (B) any manipulation, unlawful activity, disruption, anomaly, dysfunction, or other adverse market conditions of any type or description.

To the extent permitted by law and absent agreement to the contrary, each Party, for itself and its successors and assigns, hereby expressly and irrevocably waives its rights to argue before any governmental authority that any review, modification, or rescission of this Agreement should be considered under any standard of review other than the "public interest" standard set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956), affirmed by *Morgan Stanley Capital Group, Inc. v. Public Utility District No. 1 of Snohomish County, Washington, et al.*, 554 U.S. 527 (2008) (the "Mobile-Sierra Doctrine").

ARTICLE 12: REGULATORY AUTHORIZATIONS AND JURISDICTION

12.1 Compliance with Applicable Legal Authorities

The Company and the DS Supplier are subject to, and shall comply with, all existing or future applicable federal, State and local laws, all existing or future duly-promulgated orders or other duly-authorized actions of PJM or of Applicable Legal

Authorities.

12.2 FERC Jurisdictional Matters

The inclusion herein of descriptions of procedures or processes utilized by PJM or otherwise subject to the jurisdiction of FERC is intended solely for informational purposes. If anything stated herein is found by the FERC to conflict with or be inconsistent with any provision of the FPA, or any rule, regulation, order or determination of the FERC under the FPA or if any existing procedures or processes utilized by PJM are duly modified, the applicable FERC rule, regulation, order, determination or modification shall control. To the extent required under any provision of the FPA, or any rule, regulation, order or determination of the FERC under the FPA, the Company and/or the DS Supplier, if applicable, shall use reasonable commercial efforts to secure, from time to time, all appropriate orders, approvals and determinations from the FERC necessary to support this Agreement.

12.3 Energy Efficiency, Conservation, and Retail Market Programs

DS Supplier acknowledges that DS Customers may participate in energy efficiency and conservation programs offered by the Company (required by Applicable Legal Authorities or otherwise offered by the Company whether voluntarily or not), by PJM, or by other third parties and, for the avoidance of doubt, any programs offered or conducted by the Company or other entities relating to or arising from the PaPUC's Investigation of Pennsylvania's Retail Electricity Market, PaPUC Docket No. I-2011-2237952 (including legislation enacted to address the Commission's Final Order in Docket No. I-2011-2237952), and that such participation may reduce or change the amount of DS Supply that DS Supplier is required to provide and the amount of monies it may receive under this

Agreement. The Company shall have no obligation whatsoever to DS Supplier with respect to the effect, if any, of such programs. DS Supplier is solely responsible for determining the effect, if any, of such programs on future load requirements.

ARTICLE 13: LIMITATION OF REMEDIES, LIABILITY AND DAMAGES

13.1 Limitations on Liability

Except as set forth in this Agreement, there is no warranty of merchantability or fitness for a particular purpose, and any and all implied warranties are disclaimed. The Parties confirm that the express remedies and measures of Damages provided in this Agreement satisfy the essential purposes hereof. For breach of any provision for which an express remedy or measure of Damages is provided, such express remedy or measure of Damages shall be the sole and exclusive remedy, the obligor's liability shall be limited as set forth in such provision and all other remedies or Damages at law or in equity are waived. If no remedy or measure of Damages is expressly provided herein, the obligor's liability shall be limited to direct actual Damages only, such direct actual Damages shall be the sole and exclusive remedy, and all other remedies or Damages at law or in equity are waived. Unless expressly herein provided, neither Party shall be liable for consequential, incidental, punitive, exemplary or indirect Damages, lost profits or other business interruption Damages, by statute, in tort or contract, under any indemnity provision or otherwise. It is the intent of the Parties that the limitations herein imposed on remedies and the measure of Damages be without regard to the cause or causes related thereto, including the negligence or any Party, whether such negligence by sole, joint or concurrent, or active or passive. To the extent any Damages required to be paid hereunder are liquidated, the Parties acknowledge that the Damages are difficult or impossible to determine, or otherwise

obtaining an adequate remedy is inconvenient and the Damages calculated hereunder constitute a reasonable approximation of the harm or loss.

13.2 Risk of Loss

Solely for purposes of determining risk of loss and for determining the indemnity obligations under Article 14 of this Agreement, the Company shall be deemed to have custody and control of the electric Energy delivered by the DS Supplier upon receipt thereof at the point of delivery identified in Appendix C and until delivery thereof at the retail electric meter of the Customer, and the DS Supplier shall be deemed to have custody and control of the DS Supply at all times prior to receipt thereof by the Company. The Party deemed to have custody and control of DS Supply shall be responsible for all loss or damage to property or injury or death to persons arising in connection with such DS Supply while in its custody and control and shall indemnify the other Parties with respect to same as set forth in Article 14 of this Agreement.

ARTICLE 14: INDEMNIFICATION

14.1 Indemnification

(a) Should the Company become the defendant in, or obligor for, any third party claims and/or liabilities for losses, penalties, expenses, damage to property, injury to or death of any person including a Party's employees or any third parties, that were caused by or occur in connection with an act or omission of the DS Supplier with respect to an obligation arising under or in connection with this Agreement, or for which the DS Supplier has otherwise assumed liability under the terms of this Agreement, the DS Supplier shall defend (at the Company's option), indemnify and hold harmless the Company, its shareholders, board members, directors, officers and employees, from and against any and

all such third party claims and/or liabilities, and shall appoint counsel at DS Supplier's expense, subject to the approval of Company, to defend any such claims or liabilities, except to the extent that a court of competent jurisdiction determines that the losses, penalties, expenses or damages were caused wholly or in part by the gross negligence or willful misconduct of the Company. The Company may, at its own expense, retain counsel and participate in the defense of any such suit or action.

(b) Should the DS Supplier (the "Indemnified DS Supplier") become the defendant in, or obligor for, any third party claims and/or liabilities for losses, penalties, expenses, damage to property, injury to or death of any person including a Party's employees or any third parties, that were caused by or occur in connection with an act or omission of the Company with respect to an obligation arising under or in connection with this Agreement, or for which the Company has otherwise assumed liability under the terms of this Agreement, the Company shall defend (at the option of the Indemnified DS Supplier), indemnify and hold harmless the Indemnified DS Supplier, its shareholders, board members, directors, officers and employees, from and against any and all such third party claims and/or liabilities, except to the extent that a court of competent jurisdiction determines that the losses, penalties, expenses or damages were caused wholly or in part by the gross negligence or willful misconduct of the Indemnified DS Supplier. The Indemnified DS Supplier may, at its own expense, retain counsel and participate in the defense of any such suit or action.

(c) If either Party intends to seek indemnification under Article 14.1(a) or 14.1(b), as applicable, from the other Party, the Party seeking indemnification shall give the other Party notice of such claim within ninety (90) days of the later of the

commencement of, or the Party's actual knowledge of, such claim or action. Such notice shall describe the claim in reasonable detail and shall indicate the amount, estimated if necessary, of the claim that has been, or may be, sustained by said Party. To the extent that the other Party will have been actually and materially prejudiced as a result of the failure to provide such notice, such notice will be a condition precedent to any liability of the other Party under the provisions for indemnification contained in this Agreement. Neither Party may settle or compromise any claim without the prior consent of the other Party; provided, however, said consent shall not be unreasonably withheld, conditioned or delayed.

14.2 Survives Agreement

The obligation of a Party to defend, indemnify, and hold harmless another Party under this Article shall survive termination of this Agreement and shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for either Party under any statutory scheme, including any Worker's Compensation Acts, Disability Benefit Acts or other Employee Benefit Acts.

ARTICLE 15: FORCE MAJEURE

15.1 Force Majeure

Notwithstanding anything in this Agreement to the contrary, the Parties shall be excused from performing their respective obligations under this Agreement (other than the obligation to make payments with respect to performance prior to the event of Force Majeure) and shall not be liable for damages or otherwise due to their failure to perform, during any period that one Party is unable to perform due to an event of Force Majeure, provided that the Party declaring an event of Force Majeure shall: (i) act expeditiously to resume performance; (ii) exercise all commercially reasonable efforts to mitigate or limit

damages to the other Party; and (iii) fulfill the requirements set forth in Article 15.2 (Notification).

15.2 Notification

A Party unable to perform under this Agreement due to an event of Force Majeure shall: (i) provide prompt written notice of such event of Force Majeure to the other Party, which shall include an estimate of the expected duration of the Party's inability to perform due to the event of Force Majeure; and (ii) provide prompt notice to the other Party when performance resumes.

ARTICLE 16: MISCELLANEOUS PROVISIONS

16.1 Notices

Unless otherwise stated herein, all notices, demands or requests required or permitted under this Agreement shall be in writing and shall be personally delivered or sent by overnight express mail or courier service. Notice may also be provided via e-mail or facsimile transmission (with the original transmitted by any of the other delivery methods specified in the previous sentence) addressed per the notification information for the DS Supplier and Company as set forth in Exhibit 2 hereto.

Such notices, demands or requests shall also be provided to such other person at such other address as a Party may designate by like notice to the other Party. Notice received after the close of the Business Day shall be deemed received on the next Business Day.

16.2 No Prejudice of Rights

The failure of a Party to insist on any one or more instances upon strict performance of any provisions of this Agreement, or to take advantage of any of its rights hereunder,

shall not be construed as a waiver of any such provisions or the relinquishment of any such right or any other right hereunder, which shall remain in full force and effect. No term or condition of this Agreement shall be deemed to have been waived and no breach excused unless such waiver or consent to excuse is in writing and signed by the Party claimed to have waived or consented to excuse.

16.3 Effect of Regulatory or Legislative Actions

- (a) The Parties agree that the Company's obligations under this Agreement are contingent on, and limited by, the Company's ability to recover all costs incurred by it under this Agreement from its retail customers in full and on a current basis. If any statutes, rules, regulations, or orders are enacted, amended, entered, or revoked which have the effect of depriving the Company's full and current recovery of said costs, the Company may terminate this Agreement upon ten (10) days written notice. The Parties agree that any such termination shall not constitute an Event of Default under this Agreement.
- (b) If any statutes, rules, regulations, or orders are enacted, amended, entered, or revoked which transfer the Company's obligation to procure or supply DS Supply to a third party(ies), this Agreement may be transferred to such third party(ies) in accordance with the provisions of Section 16.4 below. The Parties agree that any such transfer shall not constitute an Event of Default under this Agreement.
- (c) In the event that this Agreement is terminated as a result of any of the reasons set forth in subsections (a) and (b) of Section 16.3 above, the Parties agree that the Company shall not be liable for any costs or damages incurred

or otherwise associated with (i) the transfer of the Company's obligation to obtain or provide DS Supply to third party, or (ii) the elimination of the Company's obligation to obtain or provide DS Supply from DS Supplier.

16.4 Assignment

Parties shall not assign any of their rights or obligations under this Agreement without obtaining the prior written consent of the non-assigning Party, which consent shall not be unreasonably withheld. No assignment of this Agreement shall relieve the assigning Party of any of its obligations under this Agreement until such obligations have been assumed by the assignee and all necessary consents have been obtained. Any assignment in violation of this Section 16.4 shall be void; provided, however, the Company may assign any or all of its rights and obligations under this Agreement notwithstanding anything contained herein to the contrary, without the DS Supplier's consent, to any entity succeeding to all or substantially all of the assets of the Company, or to a third party in accordance with Section 16.3(b), if such assignee agrees, in writing, to be bound by all of the terms and conditions hereof and all necessary regulatory approvals are obtained. The DS Supplier may, with prior written notice to the Company but without obtaining the approval of the Company, assign the accounts, revenues or proceeds under this Agreement to a third party. The Company agrees that, following receipt of such notice of the assignment of accounts, revenues or proceeds and such other documentation that the Company may reasonably request, the Company will pay amounts becoming due to the assigning DS Supplier under this Agreement directly to the designated assignee; provided, however, that nothing herein shall enlarge or expand the rights of such designated assignee beyond the rights granted to the DS Supplier, and the right of such designated assignee to receive payments shall be subject to all defenses, offsets and claims of the Company arising

under this Agreement.

16.5 Governing Law and Venue

To the extent not subject to the jurisdiction of the FERC, questions including those concerning the formation, validity, interpretation, execution, amendment, termination and construction of this Agreement shall be governed by the laws of the Commonwealth of Pennsylvania, without regard to principles of conflicts of law. Except for matters jurisdictional to FERC, the PUC or the appellate courts having jurisdiction over the PUC or FERC matters, all disputes hereunder shall be resolved in the Pennsylvania State court or Federal court of competent jurisdiction and within reasonably close proximity to the Company. Each Party hereby waives its respective rights to any jury trial with respect to any litigation arising under or in connection with this Agreement.

16.6 Regulatory Approvals

DS Supplier agrees to cooperate, to the fullest extent necessary, to obtain any and all required State, Federal or other regulatory approvals of the Agreement and/or Transaction Confirmations hereunder. The commencement of the Delivery Period and the obligations hereto are subject to (i) the receipt or waiver by Company of all Company required regulatory approvals, (ii) the receipt or waiver by DS Supplier of all DS Supplier required regulatory approvals, and (iii) Pennsylvania PUC approval.

16.7 Headings

The headings and subheadings contained in this Agreement are used solely for convenience and do not constitute a part of the Agreement between the Parties hereto, nor should they be used to aid in any manner in the construction of this Agreement.

16.8 Third Party Beneficiaries

This Agreement is intended solely for the benefit of the Parties hereto and nothing in this Agreement shall be construed to create any duty or standard of care with reference to, or any liability to, any person not a Party to this Agreement.

16.9 General Miscellaneous Provisions

(a) This Agreement shall not be interpreted or construed to create an association, joint venture, or partnership between the Parties, or to impose any partnership obligation or liability upon any Party. No Party shall have any right, power, or authority to enter into any agreement or undertaking for, or on behalf of, or to act as or be an agent or representative of, or to otherwise bind, any other Party.

(b) Cancellation, expiration or Early Termination of this Agreement shall not relieve the Parties of obligations that by their nature survive such cancellation, expiration or termination, including warranties, remedies, promises of indemnity and confidentiality.

(c) Should any provision of this Agreement be held invalid or unenforceable, such provision shall be invalid or unenforceable only to the extent of such invalidity or unenforceability without invalidating or rendering unenforceable any other provision hereof unless it materially changes the agreement of the Parties; provided that in such event the Parties shall use commercially reasonable efforts to amend this Agreement or any Transaction in order to give effect to the original intention of the Parties.

(d) Each of the Parties acknowledges that it has read this Agreement, understands it, and agrees to be bound by its terms. This Agreement is intended by the Parties as a final expression of their agreement. The Parties further agree that this Agreement is the complete and exclusive statement of agreement and supersedes all

proposals (oral or written), understandings, representations, conditions, warranties, covenants and all other communications between the Parties relating thereto. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. Each Party further agrees that it will not assert, or defend itself, on the basis that any applicable tariff is inconsistent with this Agreement or any Transaction.

16.10 Taxes

As between the Parties: (i) the DS Supplier is responsible for the payment of all taxes imposed by all present and future federal, state, municipal or other taxes imposed by any taxing authority on the wholesale sales of DS Supply under this Agreement; and (ii) the Company is responsible for the payment of all taxes imposed by all present and future federal, state, municipal or other taxes imposed by any taxing authority on retail sales of DS Supply under this Agreement. Should the DS Supplier be required to remit any Pennsylvania State Sales and Use Taxes directly to the applicable taxing authority, other than taxes previously collected by the DS Supplier on behalf of the Company, the Company will defend and indemnify the DS Supplier for such Sales and Use Taxes and will pay to the DS Supplier all such tax amounts upon demand. If any Transaction is exempt from the payment of any such taxes, the affected DS Supplier will, if requested, provide the Company with valid tax exemption certificates. Should the Company be required to remit any such taxes directly to any applicable taxing authority, other than taxes previously collected by the Company directly from the DS Supplier, the DS Supplier will defend and indemnify the Company and will pay to the Company all such tax amounts upon demand.

16.11 Audit

Each Party has the right on at least three (3) Business Days prior written notice, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made in accordance with Article 9 (Billing and Payment) and 9.1(i) (Interest on Unpaid Balances) of this Agreement.

16.12 Rules of Interpretation

The following principles shall be observed in the interpretation and construction of this Agreement:

- (a) Unless otherwise stated, the terms “include” and “including” when used in this Agreement shall be interpreted to mean by way of example only and shall not be considered limiting in any way;
- (b) All titles and headings used herein are for convenience and reference purposes only, do not constitute a part of this Agreement and shall be ignored in construing or interpreting the obligations of the parties under this Agreement;
- (c) References to the singular include the plural and vice versa;
- (d) References to Articles, Sections, Clauses and the Preamble are, unless the context indicates otherwise, references to Articles, Sections, Clauses and the Preamble of this Agreement;

- (e) In carrying out its rights, obligations and duties under this Agreement, each Party shall have an obligation of good faith and fair dealing; and
- (f) If any payment due under this Agreement would be, by operation of the terms and conditions of any provision hereof, due and payable on a day other than a Business Day, such payment shall be made on the next following Business Day.

16.13 Confidentiality

(a) Each Party shall hold in confidence and not release or disclose any document or information furnished by the other Party in connection with this Agreement, unless: (i) compelled to disclose such document or information by judicial, regulatory or administrative process or other provisions of law; (ii) such document or information is generally available to the public; (iii) such document or information was available to the receiving Party on a non-confidential basis; (iv) such document or information was available to the receiving Party on a non-confidential basis from a third-party, provided that the receiving Party does not know, and, by reasonable effort, could not know that such third-party is prohibited from transmitting the document or information to the receiving Party by a contractual, legal or fiduciary obligation; or (v) such disclosure is made to PJM or PaPUC and is necessary in order for the Transactions contemplated by this Agreement to be consummated or to otherwise comply with the provisions of this Agreement.

(b) Notwithstanding any other provision of this Section 16.12, a Party may disclose to its employees, representatives and agents all documents and information furnished by the other Party in connection with this Agreement, provided that such employees, representatives and agents have been advised of the confidentiality provisions

of this Section 16.12, and further provided that in no event shall a document or information be disclosed in violation of the standard of conduct requirements established by FERC.

(c) A Party receiving notice or otherwise concluding that any confidential document or information furnished by the other Party in connection with this Agreement is being sought under any provision of law, to the extent it is permitted to do so under any applicable law, shall: (i) promptly notify the other Party; and (ii) use reasonable efforts in cooperation with the other Party to seek confidential treatment of such confidential information.

(d) The Parties agree that monetary damages may be inadequate to compensate a Party for the other Party's breach of its obligations under this Section 16.12. Each Party accordingly agrees that the other Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party breaches or threatens to breach its obligations under this Article 16.12, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law.

16.14 Federal Acquisition Regulation

If any of the following clauses prescribed by the Federal Acquisition Regulation ("FAR"), 48 Code of Federal Regulations Chapter 1, should be deemed to apply to this Agreement, the DS Supplier shall comply with the requirements of such clause(s), and shall include the terms or substance of such clause(s) in its subcontracts, as and to the extent required by the FAR:

- 1) Clean Air and Water: § 52.223-2;

- 2) Contract Work Hours and Safety Standards Act-Overtime Compensation: § 52.222-4;
- 3) Equal Opportunity: § 52.222-26;
- 4) Affirmative Action for and Employment Reports on Special Disabled and Vietnam Era Veterans: § 52.222-35 and § 52.222-37;
- 5) Affirmative Action for Handicapped Workers: § 52.222-36; and
- 6) Utilization of Small Business Concerns and Small Disadvantaged Business Concerns and Small Business and Small Disadvantaged Business Subcontracting Plan: § 52.219-8 and § 52-219-9.

In case of a conflict between the provisions of the FAR and the balance of this Agreement, the requirements of the FAR shall prevail.

16.15 Binding Terms

This Agreement and the rates, terms and conditions herein shall remain in effect for the entire term hereof and each Party agrees not to seek any change to such rates, terms and conditions pursuant to the FPA, if the FPA is deemed to have jurisdiction over this Agreement, including on the grounds that they are not just and reasonable.

16.16 Amendment

This Agreement, including the appendices hereto, cannot be amended without the written agreement of all Parties prior to such amendment becoming effective. Except as provided in Appendix C, the rates, terms and conditions contained in this Agreement are not subject to change under Sections 205 or 206 of the Federal Power Act absent the mutual written agreement of the Parties. To the extent permitted by law and absent agreement to the contrary, each Party, for itself and its successors and assigns, hereby expressly and

irrevocably waives its rights to argue before any governmental authority that any review, modification, or rescission of this Agreement should be considered under any standard of review other than the “public interest” standard set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956), affirmed by *Morgan Stanley Capital Group, Inc. v. Public Utility District No. 1 of Snohomish County, Washington, et al.*, 554 U.S. 527 (2008) (the “Mobile-Sierra Doctrine”).

16.17 Counterparts

This Agreement may be executed in counterparts, each of which will be considered an original, but all of which shall constitute one instrument.

16.18 Successors

This Agreement and all of the provisions hereof are binding upon, and inure to the benefit of, the Parties and their respective successors and permitted assigns.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the date first set forth above.

ATTEST:

DUQUESNE LIGHT COMPANY

By: _____

Title: _____

Name: _____

Title: _____

ATTEST:

[INSERT]

By: _____

Title: _____

Name: _____

Title: _____

APPENDIX A- MAXIMUM UNSECURED CREDIT**Credit Rating Matrix Tables for EDC's****EDC: Duquesne Light Company**

Credit Rating of the DS Supplier			Maximum Credit Limit (calculated as the lesser of the percentage of TNW or the Credit Limit Cap below)	
S&P	Moody's	Fitch	Percentage of TNW	Credit Limit Cap
A- and above	A3 and above	A- and above	16%	\$60,000,000
BBB +	Baa1	BBB +	10%	\$40,000,000
BBB	Baa2	BBB	7%	\$30,000,000
BBB-	Baa3	BBB-	3%	\$20,000,000
Below BBB-	Below Baa3	Below BBB-	0%	\$0

Credit Rating Determination Methodology

The DS Supplier or its Guarantor must have a minimum senior unsecured debt rating (or, if unavailable, corporate issuer rating) equal to the Minimum Rating. If the DS Supplier or its Guarantor is rated by all three accepted rating agencies (S&P, Moody's and Fitch), and the ratings are split, the lowest rating will be used. **Minimum Rating** – The lowest credit rating for a DS Supplier, as set forth in this Appendix A, that can obtain unsecured credit.

APPENDIX B – METHODOLOGY FOR CALCULATION OF MARK TO MARKET (MTM) EXPOSURE

Parameters

In calculating the MtM Exposure for each Transaction, the following parameters are set on the Transaction Date:

1. On-Peak Initial Mark Price
2. Off-Peak Initial Mark Price
3. MW-Measure
4. On-Peak Estimated Energy Quantity Per MW-Measure for each of the twelve calendar months
5. Off-Peak Estimated Energy Quantity Per MW-Measure for each of the twelve calendar months
6. Number of awarded Tranches

In calculating the MtM Exposure for each Transaction, the following parameters are set each Business Day subsequent to the Transaction Date:

- 1) On-Peak Forward Price
- 2) Off-Peak Forward Price
- 3) Current Capacity PLC Per Bid Block
- 4) On-Peak Estimated Energy Quantity
- 5) Off-Peak Estimated Energy Quantity

Determination of On-Peak Forward Prices

On each Business Day subsequent to the Transaction date, Buyer or Broker will contact four Reference Market-Makers to obtain bid and ask Energy price quotes for AEP Dayton Hub On-Peak Hours for each month of the Delivery Period. For Buyer to include a monthly On-Peak Forward Price quote from a Reference Market-Maker, both bid and ask prices must be available. For any month for which there are no single month quotes, but for which there are two month, quarterly, or 12 month quotes available ("Aggregate Quotes"), Buyer shall disaggregate the Aggregate Quote into monthly components in the following manner. The most recently available single month quotes for the same calendar months contained in the Aggregate Quote shall be averaged. The percentage by which each single month price differs from average of the single month prices for the same time period of the Aggregate Quote will be applied to the Aggregate Quote to establish monthly prices for the like month of the Aggregate Quote, such that the average will be Aggregate Quote. In the event that quotes for one or more months of a multi-month block and for the entire multi-month block in aggregate are both available, but are inconsistent with each other, Buyer will use the one that is most consistent with other available quotes.

Quotes from the Reference Market-Makers will be examined to identify quotes that are out of line and potentially invalid or are in obvious error. Reference Market-Makers will be asked to either correct or verify data that is anomalous and/or inconsistent with that provided by other sources or is in obvious error. If the data cannot be verified in time for the daily mark, the anomalous data will be discarded.

To the extent that On-Peak Forward Price quotes are not available for a given month on a given Business Day, either as single month price quotes or as an Aggregate Quote, Buyer shall establish the On-Peak Forward Price for that month using a methodology that utilizes the best information available to Buyer at that time. For example, the On-Peak Forward Price for the given month may be updated based on the changes in On-Peak Forward Price quotes for different months provided by Reference Market-Makers between the prior Business Day and the current Business Day.

Determination of Off-Peak Forward Prices

On each Business Day subsequent to the Transaction date, Buyer or Broker will contact four Reference Market-Makers to obtain bid and ask Energy price quotes for AEP Dayton Hub Off-Peak Hours for each month of the Delivery Period. For Buyer to include a monthly Off-Peak Forward Price quote from a Reference Market-Maker, both bid and ask prices must be available. For any month for which there are no single month quotes, but for which there are two month, quarterly, or 12 month quotes available (“Aggregate Quotes”), Buyer shall disaggregate the Aggregate Quote into monthly components in the following manner. The most recently available single month quotes for the same calendar months contained in the Aggregate Quote shall be averaged. The percentage by which each single month price differs from the average of the single month prices for the same time period of the Aggregate Quote will be applied to the Aggregate Quote to establish monthly prices for the like month of the Aggregate Quote, such that the average will be Aggregate Quote. In the event that quotes for one or more months of a multi-month block and for the entire multi-month block in aggregate are both available, but are inconsistent with each other, Buyer will use the one that is most consistent with other available quotes. Quotes from the Reference Market-Makers will be examined to identify quotes that are out of line and potentially invalid or are in obvious error. Reference Market-Makers will be asked to either correct or verify data that is anomalous and/or inconsistent with that provided by other sources or is in obvious error. If the data cannot be verified in time for the daily mark, the anomalous data will be discarded.

To the extent that Off-Peak Forward Price quotes are not available for a given month on a given Business Day, either as single month price quotes or as an Aggregate Quote, Buyer shall establish the Off-Peak Forward Price for that month using a methodology that utilizes the best information available to Buyer at that time. For example, the Off-Peak Forward Price for the given month may be updated based on the changes in Off-Peak Forward Price

quotes for different months provided by Reference Market-Makers between the prior Business Day and the current Business Day.

Example of Disaggregating Aggregate Quotes

The following is an example of the process to be used for disaggregating Aggregate Quotes:

- a. Aggregate Quote only available for January – March: \$60/MWh.
- b. Immediate Prior Calendar year quotes for January, February, and March as follows:

January: \$42/MWh

February: \$45/MWh

March: \$40/MWh

- c. Calculations as follows:

- 1. Calculate Average price in (b) = \$42.33/MWh

- 2. Calculate monthly deviation from Average:

January: 99.2% ($\$42/\42.33)

February: 106.3% ($\$45/\42.33)

March: 94.5% ($\$40/\42.33)

- 3. Disaggregate the Aggregate Quote by applying percentages from

c.(2) to the available aggregate quote:

January: \$59.53 ($\$60 \times 99.2\%$)

February: \$63.78 ($\$60 \times 106.3\%$)

March: \$56.69 ($\$60 \times 94.5\%$)

Mark-To-Market Example

Necessary Information from a Transaction Confirmation:		
Delivery Period:	June 1, 2011 - May 31, 2012	
Bid Blocks:	3 (i)	
Estimated Energy Quantity Per MW-Measure:		
	On-Peak MWh (k)	Off-Peak MWh (l)
Jan	11800	8300
Feb	13000	9100
Mar	9100	6400
Apr	7200	5000
May	8800	6200
Jun	12900	9000
Jul	15200	10600
Aug	16000	11200
Sep	9500	6700
Oct	8300	5800
Nov	9800	6900
Dec	10900	7600

Business Day on which MtM is Calculated:	June 24, 2011
MW-Measure:	50.0 MW (m)
Current Capacity PLC Per Bid Block:	40.0 MW (n)
Percent of On-Peak Hours Remaining in Current Month:	18.2% (o)
Percent of Off-Peak Hours Remaining in Current Month:	21.7% (p)

MtM Exposure Calculation									
	a	b	c	d	e=c-a	f=d-b	g=k*n/m*j*o	h=l*n/n*j*p	i=(e*g)+(f*h)
	On-Peak Initial Mark Price \$/MWh	Off-Peak Initial Mark Price \$/MWh	On-Peak Forward Price \$/MWh	Off-Peak Forward Price \$/MWh	Change In On-Peak Price \$/MWh	Change In Off-Peak Price \$/MWh	On-Peak Estimated Energy Quantity MWh	Off-Peak Estimated Energy Quantity MWh	MtM Exposure
Jun-11	57.04	27.95	58.48	28.65	1.44	0.70	5,629	4,696	\$ 11,393
Jul-11	72.81	31.31	75.26	32.36	2.45	1.05	36,480	25,440	\$ 116,088
Aug-11	72.81	34.23	74.28	34.91	1.47	0.68	38,400	26,880	\$ 74,726
Sep-11	45.56	24.15	47.31	25.08	1.75	0.93	22,800	16,080	\$ 54,854
Oct-11	43.23	23.34	46.09	24.89	2.86	1.55	19,920	13,920	\$ 78,547
Nov-11	43.23	25.50	46.40	27.38	3.17	1.88	23,520	16,560	\$ 105,691
Dec-11	43.23	26.36	44.86	27.36	1.63	1.00	26,160	18,240	\$ 60,881
Jan-12	50.73	38.55	54.45	41.39	3.72	2.84	28,320	19,920	\$ 161,923
Feb-12	50.73	39.06	53.61	41.29	2.88	2.23	31,200	21,840	\$ 138,559
Mar-12	45.23	30.75	47.64	32.39	2.41	1.64	21,840	15,360	\$ 77,825
Apr-12	45.23	25.78	48.01	27.36	2.78	1.58	17,280	12,000	\$ 66,998
May-12	47.06	24.94	49.06	26.00	2.00	1.06	21,120	14,880	\$ 58,013
									\$ 1,005,499

CALCULATION OF MTM EXPOSURE FOR HOURLY PRICE TRANSACTIONS

The MtM Exposure for an Hourly Price Transaction shall be calculated as follows. During the first month of the term of a Transaction, the MtM Exposure shall be equal to Two Hundred Fifty Thousand Dollars (US\$250,000.00) per Tranche. Thereafter, the MtM Exposure shall be calculated on the first Business Day of each month during the term of a Transaction and shall be deemed equal to the product of: (i) Two Hundred Fifty Thousand Dollars (US\$250,000.00) per Tranche; (ii) the ratio of the Current Capacity PLC Per Tranche to the MW-Measure; (iii) the number of Tranches awarded to the DS Supplier per the Transaction Confirmation; and (iv) the ratio of the calendar days remaining in the Delivery Period to the total calendar days in the Delivery Period. The following definitions shall apply for the purposes of this calculation:

“Capacity Peak Load Contribution” or “Capacity PLC” means the aggregation of retail customer peak load contributions, as determined by the Buyer in accordance with the PJM Agreements and reported by Buyer to PJM pursuant to Buyer’s retail load settlement process, and used by PJM in determining the DS Supplier’s capacity obligation for each Transaction.

“Current Capacity PLC Per Tranche” is the Capacity PLC of a Tranche as of the Business Day the MtM Exposure is calculated for the Transaction.

“MW-Measure” means the Current Capacity PLC Per Tranche as of the Transaction Date.

APPENDIX C - DS SUPPLY SPECIFICATIONS

- 1) With respect to a Transaction, DS Supplier shall provide DS Supply on a firm and continuous basis. The terms of the Transaction shall be set forth in a Transaction Confirmation to this SMA, in a form as set forth in Exhibit 1. As used herein and in the Transaction Confirmation, Full Requirements Service shall mean all of the following necessary services or products that are required to supply the DS Responsibility Share for the DS Customers associated with the Transaction Confirmation, including: Energy, Capacity, transmission (except for Network Integration Transmission Service), Ancillary Services, Alternative Energy Credits for compliance with the AEPS Act, transmission and distribution system losses, congestion management costs, and such other products and services that are required except for distribution service.
- 2) The Transaction Confirmation shall, *inter alia*, specify the following terms with respect to a Transaction: (i) the Product (typically, Full Requirements Service); (ii) the DS Customer group associated with the applicable DS Load; (iii) the Delivery Point at which the DS Supplier shall deliver the DS Supply; (iv) the Delivery Period during which the DS Supplier shall deliver the DS Supply; (v) the number of Tranches; (vi) the DS Supplier Responsibility Share; (vii) for Fixed Price Transactions, the total number of AECs associated with each Tranche; and (viii) the DS Fixed Price or Fixed Price Adder, as applicable, for each Tranche.
- 3) The Company and DS Supplier shall be responsible for their respective PJM Billing Statement Line Item Credits and Charges associated with a Transaction as described in Appendix D, *Responsibilities for PJM Billing Line Items as Defined in Applicable PJM Agreement or Manual*. Company and DS Supplier agree to communicate

with PJM as may be necessary to ensure that PJM transfers all PJM Billing Statement Line Item Credits and Charges to the appropriate party.

- 4) The DS Supplier shall comply with all applicable requirements described in Appendix E, *DS Suppliers' Obligations For AEPS Compliance*.
- 5) Except as provided in Paragraph 1 above, DS Supplier bears the risk of any other changes in PJM products and pricing during the term of all Transactions under this Agreement. However, if there are any other new FERC-approved PJM transmission charges other than those referred to in Paragraph 1 above or other new PJM charges and costs, charged to network transmission customers, that DS Supplier believes the Company should recover through retail rates because they are directly related to the Company's obligations, then Company may file with the PaPUC a request for approval to recover such new costs. DS Supplier is required to intervene in any such proceeding before the PaPUC. Such new costs can only be charged to the Company to the extent that the PaPUC approves the Company's recovery of those costs. DS Supplier agrees to be bound by the decision of the PaPUC (subject to the normal rules for appeal of the decision of the PaPUC) and waives all claims concerning this issue before the FERC. Notwithstanding the foregoing, nothing in the Agreement shall preclude DS Supplier or Company from taking any position before the FERC regarding the creation and allocation of any such PJM charges.

DS Customer Group:

Each Transaction Confirmation shall be associated with DS Supply to one of the following

DS Customer categories, or their successors, as defined in the DS Tariff:

Customer Group	Rate Schedule	Description
Residential & Lighting	RS	Residential Service
	RH	Residential Service Heating
	RA	Residential Service Add-On Heat Pump
	AL	Architectural Lighting Service
	SE	Street Lighting Energy
	SM	Street Lighting Municipal
	SH	Street Lighting Highway
	PAL	Private Area Lighting
Small Commercial & Industrial	GS	General Service Small
	GM < 25kW	General Service Medium – Demand less than 25kW
	GMH < 25kW	General Service Medium Heating – Demand less than 25kW
	UMS	Unmetered Service
Medium Commercial & Industrial	GM ≥ 25kW and < 200kW	General Service Medium – Demand equal to or greater than 25kW and less than 200kW
	GMH ≥ 25kW and < 200kW	General Service Medium Heating – Demand equal to or greater than 25kW and less than 200kW
HPS-Eligible	GM ≥ 200kW	General Service Medium – Demand equal to or greater than 200kW
	GMH ≥ 200kW	General Service Medium – Demand equal to or greater than 200kW
	GL	General Service Large
	GLH	General Service Heating
	L	Large Power Service
	HVPS	High Voltage Power Service

APPENDIX D – RESPONSIBILITIES FOR PJM BILLING LINE ITEMS AS DEFINED IN APPLICABLE PJM AGREEMENT OR MANUAL

ID #	PJM Billing Statement Line Items	Responsible Party	
		EDC	DS Supplier
ID#	CHARGES		
1000	Amount Due for Interest on Past Charges		DS Supplier
1100	Network Integration Transmission Service	EDC	
1101	Network Integration Transmission Service (ATSI Low Voltage)	EDC	
1102	Network Integration Transmission Service (exempt)	EDC	
1103	Underground Transmission Service	EDC	
1104	Network Integration Transmission Service Offset	EDC	
1108	Transmission Enhancement	EDC	
1109	MTEP Project Cost Recovery		DS Supplier
1110	Direct Assignment Facilities		DS Supplier
1115	Transmission Enhancement Settlement (EL05-121-009)	EDC	
1120	Other Supporting Facilities		DS Supplier
1130	Firm Point-to-Point Transmission Service		DS Supplier
1133	Firm Point-to-Point Transmission Service Resale Charge		DS Supplier
1135	Neptune Voluntary Released Transmission Service (Firm)		DS Supplier
1136	Hudson Voluntary Released Transmission Service (Firm)		DS Supplier
1138	Linden Voluntary Released Transmission Service (Firm)		DS Supplier
1140	Non-Firm Point-to-Point Transmission Service		DS Supplier

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1143	Non-Firm Point-to-Point Transmission Service Resale Charge		DS Supplier
1145	Neptune Voluntary Released Transmission Service (Non-Firm)		DS Supplier
1146	Neptune Default Released Transmission Service (Non-Firm)		DS Supplier
1147	Neptune Unscheduled Usage Billing Allocation		DS Supplier
1155	Linden Voluntary Released Transmission Service (Non-Firm)		DS Supplier
1156	Linden Default Released Transmission Service (Non-Firm)		DS Supplier
1157	Linden Unscheduled Usage Billing Allocation		DS Supplier
1165	Hudson Voluntary Released Transmission Service (Non-Firm)		DS Supplier
1166	Hudson Default Released Transmission Service (Non-Firm)		DS Supplier
1167	Hudson Unscheduled Usage Billing Allocation		DS Supplier
1200	Day-ahead Spot Market Energy		DS Supplier
1205	Balancing Spot Market Energy		DS Supplier
1210	Day-ahead Transmission Congestion		DS Supplier
1215	Balancing Transmission Congestion		DS Supplier
1216	Pseudo-Tie Balancing Congestion Refund		DS Supplier
1218	Planning Period Congestion Uplift		DS Supplier
1220	Day-ahead Transmission Losses		DS Supplier
1225	Balancing Transmission Losses		DS Supplier
1230	Inadvertent Interchange		DS Supplier
1240	Day-ahead Economic Load Response		DS Supplier
1241	Real-time Economic Load Response		DS Supplier
1242	Day-ahead Load Response Charge Allocation		DS Supplier
1243	Real-time Load Response Charge Allocation		DS Supplier

1245	Emergency Load Response		DS Supplier
1250	Meter Error Correction		DS Supplier
1260	Emergency Energy		DS Supplier
1301	PJM Scheduling, System Control and Dispatch Service – Control Area Administration		DS Supplier
1302	PJM Scheduling, System Control and Dispatch Service – FTR Administration		DS Supplier
1303	PJM Scheduling, System Control and Dispatch Service –Market Support		DS Supplier
1304	PJM Scheduling, System Control and Dispatch Service – Regulation Market Administration		DS Supplier
1305	PJM Scheduling, System Control and Dispatch Service – Capacity Resource/Obligation Mgmt.		DS Supplier
1306	PJM Scheduling, System Control and Dispatch Service – Advanced Second Control Center		DS Supplier
1307	PJM Scheduling, System Control and Dispatch Service – Market Support Offset		DS Supplier
1308	PJM Scheduling, System Control and Dispatch Service Refund – Control Area Administration		DS Supplier
1309	PJM Scheduling, System Control and Dispatch Service Refund – FTR Administration		DS Supplier
1310	PJM Scheduling, System Control and Dispatch Service Refund – Market Support		DS Supplier
1311	PJM Scheduling, System Control and Dispatch Service Refund –Regulation Market Administration		DS Supplier
1312	PJM Scheduling, System Control and Dispatch Service Refund – Capacity Resource/Obligation Mgmt.		DS Supplier
1313	PJM Settlement, Inc.		DS Supplier
1314	Market Monitoring Unit (MMU) Funding		DS Supplier
1315	FERC Annual Charge Recovery		DS Supplier
1316	Organization of PJM States, Inc. (OPSI) Funding		DS Supplier

1317	North American Electric Reliability Corporation (NERC)		DS Supplier
1318	Reliability First Corporation (RFC)		DS Supplier
1320	Transmission Owner Scheduling, System Control and Dispatch Service		DS Supplier
1330	Reactive Supply and Voltage Control from Generation and Other Sources Service		DS Supplier
1340	Regulation and Frequency Response Service		DS Supplier
1350	Energy Imbalance Service		DS Supplier
1360	Synchronized Reserve		DS Supplier
1362	Non-Synchronized Reserve		DS Supplier
1365	Day-ahead Scheduling Reserve		DS Supplier
1370	Day-ahead Operating Reserve		DS Supplier
1371	Day-ahead Operating Reserve for Load Response		DS Supplier
1375	Balancing Operating Reserve		DS Supplier
1376	Balancing Operating Reserve for Load Response		DS Supplier
1377	Synchronous Condensing		DS Supplier
1378	Reactive Services		DS Supplier
1380	Black Start Service		DS Supplier
1390	Fuel Cost Policy Penalty		DS Supplier
1400	Load Reconciliation for Spot Market Energy		DS Supplier
1410	Load Reconciliation for Transmission Congestion		DS Supplier
1420	Load Reconciliation for Transmission Losses		DS Supplier
1430	Load Reconciliation for Inadvertent Interchange		DS Supplier
1440	Load Reconciliation for PJM Scheduling, System Control and Dispatch Service		DS Supplier

1441	Load Reconciliation for PJM Scheduling, System Control and Dispatch Service Refund		DS Supplier
1442	Load Reconciliation for Schedule 9-6 – Advanced Second Control Center		DS Supplier
1444	Load Reconciliation for Market Monitoring Unit Funding		DS Supplier
1445	Load Reconciliation for FERC Annual Charge Recovery		DS Supplier
1446	Load Reconciliation for Organization of PJM States, Inc. (OPSI) Funding		DS Supplier
1447	Load Reconciliation for North American Electric Reliability Corporation (NERC)		DS Supplier
1448	Load Reconciliation for Reliability First Corporation (RFC)		DS Supplier
1449	Load Reconciliation for Consumer Advocates of PJM States, Inc. (CAPS) Funding		DS Supplier
1450	Load Reconciliation for Transmission Owner Scheduling, System Control and Dispatch Service		DS Supplier
1460	Load Reconciliation for Regulation and Frequency Response Service		DS Supplier
1470	Load Reconciliation for Synchronized Reserve		DS Supplier
1472	Load Reconciliation for Non-Synchronized Reserve		DS Supplier
1475	DASR Load Reconciliation		DS Supplier
1478	Load Reconciliation for Operating Reserve		DS Supplier
1480	Load Reconciliation for Synchronous Condensing		DS Supplier
1490	Load Reconciliation for Reactive Services		DS Supplier
1500	Financial Transmission Rights Auction		DS Supplier
1600	RPM Auction		DS Supplier
1610	Locational Reliability		DS Supplier
1611	CP Transitional Locational Reliability		DS Supplier
1650	Non-Unit Specific Capacity Transaction		DS Supplier

1660	Demand Resource and ILR Compliance Penalty		DS Supplier
1661	Capacity Resource Deficiency		DS Supplier
1662	Generation Resource Rating Test Failure		DS Supplier
1663	Qualifying Transmission Upgrade Compliance Penalty		DS Supplier
1664	Peak Season Maintenance Compliance Penalty		DS Supplier
1665	Peak-Hour Period Availability		DS Supplier
1666	Load Management Test Failure		DS Supplier
1670	FRR LSE Reliability		DS Supplier
1680	FRR LSE Demand Resource And Ilr Compliance Penalty		DS Supplier
1681	FRR LSE Capacity Resource Deficiency		DS Supplier
1682	FRR LSE Generation Resource Rating Test Failure		DS Supplier
1683	FRR LSE Qualifying Transmission Upgrade Compliance Penalty		DS Supplier
1684	FRR LSE Peak Season Maintenance Compliance Penalty		DS Supplier
1685	FRR LSE Peak-Hour Period Availability		DS Supplier
1686	FRR LSE Load Management Test Failure		DS Supplier
1687	FRR LSE Schedule 9-5		DS Supplier
1688	FRR LSE Schedule 9-6		DS Supplier
1710	PJM/MISO Seams Elimination Cost Assignment		DS Supplier
1712	Intra-PJM Seams Elimination Cost Assignment		DS Supplier
1720	RTO Start-up Cost Recovery		DS Supplier
1730	Expansion Cost Recovery	EDC	
1900	Unscheduled Transmission Service		DS Supplier
1910	Ramapo Phase Angle Regulators		DS Supplier

1911	Michigan – Ontario Interface Phase Angle Regulators		DS Supplier
1920	Station Power		DS Supplier
1930	Generation Deactivation	EDC	
1932	Generation Deactivation Refund	EDC	
1950	Virginia Retail Administrative Fee		DS Supplier
1952	Deferred Tax Adjustment	EDC	
1955	Deferral Recovery		DS Supplier
1980	Miscellaneous Bilateral		DS Supplier
1995	PJM Annual Membership Fee		DS Supplier
1999	PJM Customer Payment Default		DS Supplier
ID#	CREDITS		
2100	Network Integration Transmission Service	EDC	
2101	Network Integration Transmission Service (ATSI Low Voltage)	EDC	
2102	Network Integration Transmission Service (exempt)	EDC	
2103	Underground Transmission Service	EDC	
2104	Network Integration Transmission Service Offset	EDC	
2106	Non-Zone Network Integration Transmission Service	EDC	
2108	Transmission Enhancement	EDC	
2109	MTEP Project Cost Recovery		DS Supplier
2110	Direct Assignment Facilities		DS Supplier
2120	Other Supporting Facilities		DS Supplier
2130	Firm Point-to-Point Transmission Service		DS Supplier
2132	Internal Firm Point-to-Point Transmission Service		DS Supplier

2133	Firm Point-to-Point Transmission Service Resale Credit		DS Supplier
2135	Neptune Voluntary Released Transmission Service (Firm)		DS Supplier
2136	Hudson Voluntary Released Transmission Service (Firm)		DS Supplier
2138	Linden Voluntary Released Transmission Service (Firm)		DS Supplier
2140	Non-Firm Point-to-Point Transmission Service		DS Supplier
2142	Internal Non-Firm Point-to-Point Transmission Service		DS Supplier
2143	Non-Firm Point-to-Point Transmission Service Resale Credit		DS Supplier
2145	Neptune Voluntary Released Transmission Service (Non-Firm)		DS Supplier
2146	Neptune Default Released Transmission Service (Non-Firm)		DS Supplier
2155	Linden Voluntary Released Transmission Service (Non-Firm)		DS Supplier
2156	Linden Default Released Transmission Service (Non-Firm)		DS Supplier
2165	Hudson Voluntary Released Transmission Service (Non-Firm)		DS Supplier
2166	Hudson Default Released Transmission Service (Non-Firm)		DS Supplier
2210	Transmission Congestion		DS Supplier
2211	Day-ahead Transmission Congestion		DS Supplier
2215	Balancing Transmission Congestion		DS Supplier
2217	Planning Period Excess Congestion		DS Supplier
2218	Planning Period Congestion Uplift		DS Supplier
2220	Transmission Losses		DS Supplier
2240	Day-ahead Economic Load Response		DS Supplier
2241	Real-time Economic Load Response		DS Supplier
2245	Emergency Load Response		DS Supplier
2260	Emergency Energy		DS Supplier

2320	Transmission Owner Scheduling, System Control and Dispatch Service		DS Supplier
2330	Reactive Supply and Voltage Control from Generation and Other Sources Service		DS Supplier
2340	Regulation and Frequency Response Service		DS Supplier
2350	Energy Imbalance Service		DS Supplier
2360	Synchronized Reserve		DS Supplier
2362	Non-Synchronized Reserve		DS Supplier
2365	Day-ahead Scheduling Reserve		DS Supplier
2370	Day-ahead Operating Reserve		DS Supplier
2371	Day-ahead Operating Reserve for Load Response		DS Supplier
2375	Balancing Operating Reserve		DS Supplier
2376	Balancing Operating Reserve for Load Response		DS Supplier
2377	Synchronous Condensing		DS Supplier
2378	Reactive Services		DS Supplier
2380	Black Start Service		DS Supplier
2415	Balancing Transmission Congestion Load Reconciliation		DS Supplier
2420	Load Reconciliation for Transmission Losses		DS Supplier
2500	Financial Transmission Rights Auction		DS Supplier
2510	Auction Revenue Rights		DS Supplier
2600	RPM Auction		DS Supplier
2620	Interruptible Load for Reliability		DS Supplier
2630	Capacity Transfer Rights		DS Supplier
2640	Incremental Capacity Transfer Rights		DS Supplier
2650	Non-Unit Specific Capacity Transaction		DS Supplier

2660	Demand Resource and ILR Compliance Penalty		DS Supplier
2661	Capacity Deficiency Resource		DS Supplier
2662	Generation Resource Rating Test Failure		DS Supplier
2663	Qualifying Transmission Upgrade Compliance Penalty		DS Supplier
2664	Peak Season Maintenance Compliance Penalty		DS Supplier
2665	Peak-Hour Period Availability		DS Supplier
2666	Load Management Test Failure		DS Supplier
2670	FRR LSE Reliability Credit		DS Supplier
2680	FRR LSE Demand Resource And Ilr Compliance Penalty		DS Supplier
2681	FRR LSE Capacity Resource Deficiency		DS Supplier
2682	FRR LSE Generation Resource Rating Test Failure		DS Supplier
2683	FRR LSE Qualifying Transmission Upgrade Compliance Penalty		DS Supplier
2684	FRR LSE Peak Season Maintenance Compliance Penalty		DS Supplier
2685	FRR LSE Peak-Hour Period Availability		DS Supplier
2686	FRR LSE Load Management Test Failure		DS Supplier
2687	FRR LSE Schedule 9-5		DS Supplier
2688	FRR LSE Schedule 9-6		DS Supplier
2710	PJM/MISO Seams Elimination Cost Assignment		DS Supplier
2712	Intra-PJM Seams Elimination Cost Assignment		DS Supplier
2720	RTO Start-up Cost Recovery		DS Supplier
2730	Expansion Cost Recovery	EDC	
2910	Ramapo Phase Angle Regulators		DS Supplier
2912	CT Lost Opportunity Cost Allocation		DS Supplier

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2930	Generation Deactivation	EDC	
2932	Generation Deactivation Refund	EDC	
2950	Virginia Retail Administrative Fee		DS Supplier
2952	Deferred Tax Adjustment	EDC	
2955	Deferral Recovery		DS Supplier
2980	Miscellaneous Bilateral		DS Supplier
2996	Annual PJM Cell Tower		DS Supplier
2997	Annual PJM Building Rent		DS Supplier

APPENDIX E – DS SUPPLIER’S OBLIGATIONS FOR AEPS COMPLIANCE

With respect to the DS Supplier Responsibility Share, DS Supplier shall:

- (1) Provide sufficient AECs for each Tranche, in accordance with the schedule provided below.
- (2) Provide actual AECs that conform to all applicable PaPUC or other legal requirements in effect as of the date that the AECs are provided to the Company. DS Supplier shall be responsible for any incremental costs associated with ensuring that the AECs it provides to the Company conform to such requirements then in effect.
- (3) Provide AECs on a six (6) month basis or at the end of any Delivery Period, if the Delivery Period is less than six (6) months, and shall be transferred to the Company within 30 days from the final day of any such six month period or Delivery Period; provided; however, that if the term of any Delivery Period includes two different AEPS reporting years, then DS Supplier shall provide the AECs required for the first AEPS reporting year by June 30th of each year.
- (4) Pay any penalties, costs, charges, damages, or other fees assessed against the DS Supplier and/or the Company associated with the DS Supplier’s non-performance with this Agreement or any other applicable requirements related to AEPS.
- (5) Submit to the Company proof of compliance under this Agreement in such form and manner as may be required by the Company.
- (6) Provide to the Company all information the Company may require to comply with the AEPS Act and its implementing regulations and other

requirements of law, including, but not limited to the price paid per AEC required by 73 Pa. C.S. § 1648.3(e)(8).

This Appendix E shall confirm the Alternative Energy Portfolio Standards Obligation of the Transaction agreed to on [Month, Day, Year] ("Bid Proposal Due Date").

With respect to Transactions for Full Requirements Service, the DS Supplier shall deliver AECs conforming to all applicable requirements for the period beginning [Month, Day, Year] based on a percentage of the total MWh supplied by DS Supplier, in accordance with the following schedule:

<u>Compliance Period</u>	<u>Tier 1</u>	<u>PV</u>	<u>Tier 2</u>
6/1/2021 – 5/31/2022	7.5%	0.50%	10.0%

The percentages set forth above are those applicable for the first DS auction in DSP IX and may be revised for future DS Auctions to reflect changes in law or other applicable requirements. Unless the PaPUC or other authority with jurisdiction implements changes related to AEPS, compliance obligations for periods beyond 6/1/2021 to 5/31/2022 will remain at the 6/1/2021 to 5/31/2022 percentages. These are subject to revision if there are changes from the Pennsylvania AEPS Administrator.

For each compliance period during the Delivery Period, the number of AECs that a DS Supplier is obligated to provide may be reduced by a pre-determined number of AECs allocated to the DS Supplier ("Allocated AECs"). The number of Allocated AECs will be defined prior to the Transaction Date. Any Allocated AECs will not be transferred to the DS Supplier; but instead, the DS Supplier's AEC obligations will be reduced by a pro rata share of the Allocated AECs, and the Allocated AECs will remain the property of the Company.

The above amounts are estimates and will vary based on actual load served. DS Supplier will need to true-up, higher or lower, actual credits needed based on final reconciled settlement data from PJM.

EXHIBIT 1

TRANSACTION CONFIRMATION FOR FIXED PRICE TRANSACTIONS

This Transaction Confirmation letter is being provided pursuant to and in accordance with the Agreement dated [Month, Day, Year] (**Date of the Contract/DS Auction**) between Duquesne Light Company (“Company”) and [INSERT] (“DS Supplier”). Terms used but not defined herein shall have the meanings ascribed to them in the Agreement. This Transaction Confirmation shall confirm the following terms of the Transaction agreed to on [Month, Day, Year] (**Date of the current DS Auction for the tranches the won and will be serving**) (“Transaction Date”).

Product: Full Requirements Service

DS Customer Group: [INSERT CUSTOMER CLASS]

Delivery Point: Duquesne Residual Aggregate Zone in PJM Pnode 116472943

Delivery Period: [Month, Day, Year] through [Month, Day, Year]

Number of Tranches: [INSERT]

DS Fixed Percentage: [INSERT] % of DEFAULT SERVICE Load (for applicable customer class)

DS Fixed Price: [INSERT AVERAGE PRICE] per MWh

Tranche 1 at [INSERT] per MWh

Tranche 2 at [INSERT] per MWh

Tranche 3 at [INSERT] per MWh

⋮

Tranche [X] at [INSERT] per MWh

Alternative Energy Credit (AEC) Allocation (if any):

Alternative Energy Portfolio Standards - Reporting Period	AEC Allocation per Tranche, (AECs)	Total AEC Allocation (AECs)
2021-22		

Please confirm that the terms stated herein accurately reflect the agreement reached on the date above between DS Supplier and Company by returning an executed copy of this Transaction Confirmation by email to the Company at energysupply@duqlight.com. The signatories to this Transaction must have the authority to enter into this Transaction.

Duquesne Light Company

By: _____

Name: _____

Title: _____

[INSERT]

By: _____

Name: _____

Title: _____

TRANSACTION CONFIRMATION FOR HOURLY PRICE TRANSACTIONS

This Transaction Confirmation letter is being provided pursuant to and in accordance with the Agreement dated [Month, Day, Year] (**Date of the Contract/DS Auction**) between Duquesne Light Company (“Company”) and [INSERT] (“DS Supplier”). Terms used but not defined herein shall have the meanings ascribed to them in the Agreement. This Transaction Confirmation shall confirm the following terms of the Transaction agreed to on [Month, Day, Year] (**Date of the current DS Auction for the tranches the won and will be serving**) (“Transaction Date”).

Product: Full Requirements Service
 DS Customer Group: HPS-Eligible Class
 Delivery Point: Duquesne Residual Aggregate Zone in PJM Pnode 116472943
 Delivery Period: [Month, Day, Year] through [Month, Day, Year]
 Number of Tranches: [INSERT]
 DS Fixed Percentage: [INSERT] % of DEFAULT SERVICE Load (for applicable customer class)
 DS Fixed Price Adder
 For Hourly Price Service: [INSERT AVERAGE PRICE] per MWh
 Tranche 1 at [INSERT] per MWh
 Tranche 2 at [INSERT] per MWh

In addition to the DS Fixed Price Adder For Hourly Price Service above, the Statement prepared in accordance with Section 9.1(a) also will include DS Variable Payments based on the Company’s billed Hourly Price Service formula rate designed to recover the costs of energy, capacity, ancillary services, and PJM administrative costs found in Rider No. 9 of the DS Tariff. The DS Variable Payments associated with serving the DS Supplier Responsibility Share of the DS Supply for HPS-Eligible Class are based on a) hourly energy charges provided at the day-ahead PJM locational marginal prices based on the customer’s real time metered hourly load, plus energy-related ancillary services including PJM administrative charges, adjusted for losses, and b) capacity charges equal to the full PJM Reliability Pricing Model capacity price for the Duquesne Zone, and shall recover the charges associated with the customer’s share of the Company’s capacity obligation assigned by PJM, plus the charges for capacity based ancillary services. The PMEA/FMEA Adjustment Amount calculated in accordance with Section 9.1 (d) will include: any adjustments to account for changes in the hourly energy or capacity volumes used to calculate the energy, ancillary services, capacity and other charges. The DS Variable Payments to Hourly Price Service suppliers will not include Pennsylvania gross receipts taxes or the fixed retail administrative charge (other than the DS Fixed Price Adder For Hourly Price Service) included in the DS Tariff.

Alternative Energy Portfolio Standards - Reporting Period	AEC Allocation per Tranche, (AECs)	Total AEC Allocation (AECs)
2021-22		

Please confirm that the terms stated herein accurately reflect the agreement reached on the date above between DS Supplier and Company by returning an executed copy of this Transaction Confirmation by email to the Company at energysupply@duqlight.com. The signatories to this Transaction must have the authority to enter into this Transaction.

Duquesne Light Company
 By: _____
 Name: _____
 Title: _____

[INSERT]
 By: _____
 Name: _____
 Title: _____

EXHIBIT 2
FORM OF NOTICE

Any notices required under this Agreement shall be made as follows:

Buyer:

Duquesne Light Company

All Notices:

Street: 411 Seventh Ave.
City/State/Zip: Pittsburgh, PA 15219
Attn: Chief Financial Officer
Facsimile: (412) 393-1190
Duns: 007915606
Federal Tax ID Number: 25-0451600

Invoices:

Attn: Supply Procurement – John Peoples
Phone: (412) 393-6385
Email: jpeoples@duqlight.com

Scheduling:

Attn: Scheduling – John Peoples
Phone: (412) 393-6385
Email: jpeoples@duqlight.com

Payments:

Attn: Accounting – Jaime Bachota
Phone: (412) 393-1122
Email: jbachota@duqlight.com

Wire Transfer:

BNK:
ABA:
ACCT:

DS Supplier:

[INSERT]

All Notices:

Street:
City/State/Zip:
Attn:
Facsimile:
Duns:
Federal Tax ID Number:

Invoices:

Attn:
Phone:
Facsimile:

Scheduling:

Attn:
Phone:
Facsimile:

Payments:

Attn:
Phone:
Facsimile:

Wire Transfer

BNK:
ABA:
ACCT:

Credit and Collections:

Attn: Treasurer – James Milligan
Phone: (412) 393-1216
Email: jmilligan@duqlight.com

With additional Notices of an

Event of Default to:

Attn: Legal Department – Tishekia Williams
Phone: (412) 393-1541
Email: twilliams@duqlight.com

Credit and Collections:

Attn:
Phone:
Facsimile:

With Additional Notices of an

Event of Default to:

Attn:
Phone:
Facsimile:

EXHIBIT 3

PERFORMANCE ASSURANCE LETTER OF CREDIT

{TO BE ISSUED ON THE LETTERHEAD OF THE ISSUING BANK}

IRREVOCABLE LETTER OF CREDIT NO.

ISSUE DATE _____ EXPIRY DATE _____

APPLICANT
[NAME]
[ADDRESS]

BENEFICIARY
[NAME]
[ADDRESS]

CURRENCY
USD

AMOUNT
*****\$

WE HEREBY ISSUE IN YOUR FAVOR OUR IRREVOCABLE LETTER OF CREDIT NO:
_____ FOR THE ACCOUNT OF _____ ("APPLICANT") FOR AN
AMOUNT OR AMOUNTS NOT TO EXCEED IN THE AGGREGATE US DOLLARS
_____ AVAILABLE BY YOUR DRAFT(S) AT SIGHT ON THE
BANK OF _____ ("ISSUER") _____ {ADDRESS},
EFFECTIVE _____ AND EXPIRING AT OUR COUNTERS AT
_____ ON OR BEFORE _____ OR ANY
AUTOMATICALLY EXTENDED EXPIRY DATE, AS PROVIDED HEREIN. THIS LETTER OF
CREDIT IS AVAILABLE IN ONE OR MORE DRAFTS UP TO THE AGGREGATE AMOUNT
SET FORTH HEREIN.

THIS LETTER OF CREDIT IS PRESENTABLE AND PAYABLE AT OUR COUNTERS AND
DRAFTS DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF
CREDIT WILL BE HONORED UPON PRESENTATION TO ISSUER OF THE FOLLOWING
STATEMENT:

"I HEREBY CERTIFY THAT BENEFICIARY, DUQUESNE LIGHT COMPANY,
IS ENTITLED TO DRAW THE AMOUNT OF THE ACCOMPANYING DRAFT
UNDER LETTER OF CREDIT NO. _____, ISSUED BY
_____ {ISSUER'S NAME} AND THAT SUCH DRAFT
REPRESENTS AN AMOUNT DUE AND PAYABLE TO BENEFICIARY FROM
_____ {APPLICANT'S NAME} FOR PERFORMANCE
ASSURANCE RELATED TO THE DEFAULT SUPPLY MASTER
AGREEMENT(S) DATED _____ BETWEEN BENEFICIARY
AND APPLICANT."

THE AMOUNT WHICH MAY BE DRAWN BY BENEFICIARY UNDER THIS LETTER OF CREDIT SHALL BE AUTOMATICALLY REDUCED BY THE AMOUNT OF ANY DRAWINGS PAID THROUGH ISSUER REFERENCING THIS LETTER OF CREDIT NO. _____.

IF PRESENTATION OF ANY DRAWING IS MADE ON A BUSINESS DAY (AS HEREIN DEFINED) AND SUCH PRESENTATION IS MADE ON OR BEFORE 11:00 A.M. NEW YORK TIME, ISSUER WILL SATISFY SUCH DRAWING REQUEST ON THE NEXT BUSINESS DAY. IF THE DRAWING IS RECEIVED AFTER 11:00 A.M. NEW YORK TIME, ISSUER WILL SATISFY SUCH DRAWING REQUEST ON THE SECOND FOLLOWING BUSINESS DAY.

IT IS A CONDITION OF THIS LETTER OF CREDIT THAT IT WILL BE AUTOMATICALLY EXTENDED WITHOUT AMENDMENT FOR ONE (1) YEAR FROM THE EXPIRATION DATE HEREOF, OR ANY FUTURE EXPIRATION DATE, UNLESS AT LEAST 90 DAYS PRIOR TO ANY EXPIRATION DATE WE NOTIFY YOU AT THE ABOVE ADDRESS BY REGISTERED MAIL OR HAND DELIVERED COURIER THAT WE ELECT NOT TO CONSIDER THIS LETTER OF CREDIT RENEWED FOR ANY SUCH PERIOD.

THIS LETTER OF CREDIT MAY BE TERMINATED UPON BENEFICIARY'S RECEIPT OF FULL PAYMENT FROM APPLICANT AND ISSUER'S RECEIPT OF A WRITTEN RELEASE FROM BENEFICIARY RELEASING ISSUER FROM ITS OBLIGATIONS UNDER THIS LETTER OF CREDIT.

THE TERM "BUSINESS DAY" AS USED HEREIN MEANS ANY DAY OTHER THAN (I) A SATURDAY, (II) A SUNDAY, OR (III) A DAY ON WHICH BANKING INSTITUTIONS LOCATED IN THE CITY OF NEW YORK, NEW YORK ARE REQUIRED OR AUTHORIZED BY LAW TO BE CLOSED.

APPLICANT'S FILING OF A BANKRUPTCY, RECEIVERSHIP OR OTHER DEBTOR-RELIEF PETITION, AND/OR APPLICANT'S DISCHARGE THEREUNDER, SHALL IN NO WAY AFFECT THE LIABILITY OF ISSUER UNDER THIS LETTER OF CREDIT AND ISSUER SHALL ALWAYS REMAIN LIABLE TO BENEFICIARY FOR THE FULL AMOUNT OF APPLICANT'S OBLIGATIONS TO BENEFICIARY AS SET FORTH HEREIN NOT TO EXCEED THE AVAILABLE AMOUNT IN THIS LETTER OF CREDIT.

ADDITIONAL TERMS AND CONDITIONS:

1. ALL COMMISSIONS AND OTHER BANKING CHARGES WILL BE BORNE BY APPLICANT.
2. THIS LETTER OF CREDIT MAY BE TRANSFERRED OR ASSIGNED.
3. THIS LETTER OF CREDIT IS IRREVOCABLE.
4. THIS LETTER OF CREDIT IS SUBJECT TO THE INTERNATIONAL STANDBY PRACTICES (1998) OF THE INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 590 ("ISP98") OR SUCH LATER REVISIONS(S) OF THE ISP AS MAY BE HEREAFTER ADOPTED. AS TO MATTERS NOT GOVERNED BY ISP98, THIS LETTER OF CREDIT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, INCLUDING, TO THE EXTENT NOT INCONSISTENT WITH

ISP98, THE UNIFORM COMMERCIAL CODE AS IN EFFECT IN THE STATE OF PENNSYLVANIA. THIS LETTER OF CREDIT MAY NOT BE AMENDED, CHANGED OR MODIFIED WITHOUT THE EXPRESS WRITTEN CONSENT OF BENEFICIARY AND ISSUER.

5. BENEFICIARY SHALL NOT BE DEEMED TO HAVE WAIVED ANY RIGHTS UNDER THIS LETTER OF CREDIT, UNLESS BENEFICIARY OR AN AUTHORIZED AGENT OF BENEFICIARY SHALL HAVE SIGNED A DATED WRITTEN WAIVER. NO SUCH WAIVER, UNLESS EXPRESSLY SO STATED THEREIN, SHALL BE EFFECTIVE AS TO ANY TRANSACTION THAT OCCURS SUBSEQUENT TO THE DATE OF THE WAIVER, NOR AS TO ANY CONTINUANCE OF A BREACH AFTER THE WAIVER.

6. A FAILURE TO MAKE ANY PARTIAL DRAWINGS AT ANY TIME SHALL NOT IMPAIR OR REDUCE THE AVAILABILITY OF THIS LETTER OF CREDIT IN ANY SUBSEQUENT PERIOD OR OUR OBLIGATION TO HONOR YOUR SUBSEQUENT DEMANDS FOR PAYMENT MADE IN ACCORDANCE WITH THE TERMS OF THIS LETTER OF CREDIT.

AUTHORIZED SIGNATURE: _____

TITLE: _____

PLEASE DIRECT ANY WRITTEN CORRESPONDENCE, INCLUDING DRAWING OR INQUIRIES TO:

[BANK NAME, ADDRESS AND PHONE NUMBER]

EXHIBIT 4

FORM OF GUARANTY

THIS GUARANTY AGREEMENT (this "Guaranty") is made and entered into as of this day of _____, by _____ ("Guarantor"), with an address at _____, in favor of Duquesne Light Company ("Creditor"), with an address at 411 Seventh Avenue, Pittsburgh, PA 15219, in consideration of the Default Supply Master Agreement(s) (the "DSMA(s)") between Creditor and _____ ("Seller") dated _____, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged.

WHEREAS, Guarantor is an _____ of Seller, and will therefore benefit by Seller entering into the DSMA with Creditor and Guarantor desires Creditor to enter into the DSMA with Seller and to extend credit to Seller thereunder.

WHEREAS, without this Guaranty, Creditor would not execute and deliver the DSMA or consummate the transactions contemplated thereby. Therefore, in consideration of the execution and delivery by Creditor of the DSMA and consummation of the transactions contemplated thereby, Guarantor has agreed to execute and deliver this Guaranty.

NOW, THEREFORE, in consideration of the premises, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Guarantor hereby agrees as follows:

1. Guaranty of Obligations.

(a) Guarantor hereby irrevocably and unconditionally guarantees, as primary obligor and not a surety with effect from date hereof, the prompt and complete payment when due of all of Seller's payment obligations under the DSMA, whether on scheduled payment dates, when due upon demand, upon declaration of termination or otherwise, in accordance with the terms of the DSMA and giving effect to any applicable grace period, and all reasonable out-of-pocket costs and expenses incurred by Creditor in the enforcement of Guarantor's obligations or collection under this Guaranty, including reasonable attorney's fees and expenses (collectively, the "Obligations").

(b) The limitations on liabilities of Seller set forth in Article 13 of the DSMA shall also apply to the liabilities of Guarantor hereunder.

2. Nature of Guaranty; Waivers.

(a) This is a guaranty of payment and not of collection and Creditor shall not be required, as a condition of Guarantor's liability, to pursue any rights which may be available to it with respect to any other person who may be liable for the payment of the Obligations. This is not a performance guaranty and Guarantor is not obligated to provide power under the DSMA or this Guaranty.

(b) This Guaranty is an absolute, unconditional, irrevocable (subject to the provisions of Section 12 of this Guaranty) and continuing guaranty and will remain in full force and effect until all of the Obligations have been indefeasibly paid in full, or until the DSMA has been terminated, whichever comes later. This Guaranty will not be affected by any surrender, exchange, acceptance, compromise or release by Creditor of any other party, or any other guaranty or any security held by it for any of the Obligations, by any failure of Creditor to take any steps to perfect or maintain its lien or security interest in or to preserve its rights to any security or other collateral for any of the Obligations or any guaranty, or by any irregularity, unenforceability or invalidity of any of the Obligations (other than any irregularity, unenforceability or invalidity of any of the obligations under the DSMA resulting from the conduct of Creditor) or any part thereof.

(c) Except as to any claims, defenses, rights of set-off or to reductions of Seller in respect of its obligations under the DSMA (all of which are expressly reserved under this Guaranty), Guarantor's obligations hereunder shall not be affected, modified or impaired by any counterclaim, set-off, deduction or defense based upon any claim Guarantor may have against Seller or Creditor, including: (i) any change in the corporate existence (including its charter or other governing agreement, laws, rules, regulations or powers), structure or ownership of Seller or Guarantor; or (ii) any insolvency, bankruptcy, reorganization or other similar proceeding affecting Seller or its assets; or (iii) the invalidity or unenforceability in whole or in part of the DSMA; or (iv) any provision of applicable law or regulations purporting to prohibit payment by Seller of amounts to be paid by it under the DSMA (other than any law or regulation that eliminates or nullifies the obligations under the DSMA).

(d) Guarantor waives notice of acceptance of this Guaranty, diligence, presentment, notice of dishonor and protest and any requirement that at any time any person exhaust any right to take any action against Seller or their assets or any other guarantor or person; provided, however, that any failure of Creditor to give notice will not discharge, alter or diminish in any way Guarantor's obligations under this Guaranty. Guarantor waives all defenses based on suretyship or impairment of collateral or any other defenses that would constitute a legal or equitable discharge of Guarantor's obligations, except any claims or defenses of Seller in respect of its obligations under the DSMA.

(e) Creditor at any time and from time to time, without notice to or the consent of Guarantor, and without impairing or releasing, discharging or modifying Guarantor's liabilities hereunder, may (i) to the extent permitted by the DSMA, change the manner, place, time or terms of payment or performance of, or other terms relating to, any of the Obligations; (ii) to the extent permitted by the DSMA, renew, substitute, modify, amend or alter, or grant consents or waivers relating to any of the Obligations, or any other guaranties for any Obligations; (iii) settle, compromise or deal with any other person, including Seller, with respect to any Obligations in such manner as Creditor deems appropriate at its sole discretion; (iv) substitute, exchange or release any guaranty; or (v) take such actions and exercise such remedies hereunder as Creditor deems appropriate.

3. Representations and Warranties. Guarantor hereby represents and warrants that:

(a) it is a [limited liability company, corporation, limited partnership, general partnership] duly organized, validly existing and in good standing under the laws of the jurisdiction of its [formation, organization, incorporation] and has the [corporate power] [power] and authority to conduct the business in which it is currently engaged and enter into and perform its obligations under this Guaranty;

(b) it has the [corporate power] [power] and authority and the legal right to execute and deliver, and to perform its obligations under, this Guaranty, and has taken all necessary [corporate action] [action] to authorize its execution, delivery and performance of this Guaranty;

(c) this Guaranty constitutes a legal, valid and binding obligation of Guarantor enforceable in accordance with its terms, except as affected by bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting the enforcement of Creditors' rights generally, general equitable principles and an implied covenant of good faith and fair dealing;

(d) the execution, delivery and performance of this Guaranty will not violate any provision of any requirement of law or contractual obligation of Guarantor (except to the extent that any such violation would not reasonably be expected to have a material adverse effect on Guarantor or this Guaranty);

(e) no consent or authorization of, filing with, or other act by or in respect of, any arbitrator or governmental authority and no consent of any other person (including, without limitation, any stockholder or of Guarantor) is required in connection with the execution, delivery, performance, validity or enforceability of this Guaranty, other than any which have been obtained or made prior to the date hereof and remain in full force and effect; and

(f) no litigation, investigation or proceeding of or before any arbitrator or governmental authority is pending or, to the knowledge of Guarantor, threatened by or against Guarantor that would have a material adverse effect on this Guaranty.

4. Repayments or Recovery from Creditor. If any demand is made at any time upon Creditor for the repayment or recovery of any amount received by it in payment or on account of any of the Obligations, including but not limited to upon the bankruptcy, insolvency, dissolution or reorganization of Seller and if Creditor repays all or any part of such amount by reason of any judgment, decree or order of any court or administrative body or by reason of any settlement or compromise of any such demand, Guarantor (subject to Sections 2 (c) and (d) of this Guaranty) will be and remain liable hereunder for the amount so repaid or recovered to the same extent as if such amount had never been received originally by Creditor. The provisions of this section will be and remain effective notwithstanding any contrary action which may have been taken by Guarantor in reliance upon such payment, and any such contrary action so taken will be without prejudice to Creditor's rights hereunder and will be deemed to have been conditioned upon such payment having become final and irrevocable.

5. Enforceability of Obligations. No modification, limitation or discharge of the Obligations of Seller arising out of or by virtue of any bankruptcy, reorganization or similar proceeding for relief

of debtors under federal or state law will affect, modify, limit or discharge Guarantor's liability in any manner whatsoever and this Guaranty will remain and continue in full force and effect and will be enforceable against Guarantor to the same extent and with the same force and effect as if any such proceeding had not been instituted. Guarantor waives all rights and benefits which might accrue to it by reason of any such proceeding and will be liable to the full extent hereunder, irrespective of any modification, limitation or discharge of the liability of Seller that may result from any such proceeding.

6. Postponement of Subrogation. Only to the extent that, at the relevant time, there are Obligations, or other amounts hereunder, that are then due and payable but unpaid, Guarantor postpones and subordinates in favor of Creditor any and all rights which Guarantor may have to (a) assert any claim against Seller based on subrogation rights with respect to payments made by Guarantor hereunder and (b) any realization on any property of Seller, including participation in any marshalling of Seller's assets. Upon payment of such due and unpaid Obligations, Creditor agrees that Guarantor shall be subrogated to the rights of Creditor against Seller to the extent of Guarantor's payment to Creditor.

7. Notices. All notices, demands, requests, consents, approvals and other communications required or permitted hereunder must be in writing and will be effective upon receipt. Such notices and other communications may be hand-delivered, sent by email transmission with confirmation of delivery and a copy sent by first-class mail, or sent by nationally recognized overnight courier service, to the addresses for Creditor and Guarantor set forth below or to such other address as one may give to the other in writing for such purpose:

All communications to Creditor shall be directed to:

Attn:
Phone:
Email:
With a copy to:

Phone:
Email:

or such other address as Creditor shall from time to time specify to Guarantor.

All communications to Guarantor shall be directed to:

Attn:
Phone:
Email:

or such other address as Guarantor shall from time to time specify to Creditor.

8. Preservation of Rights. Except as provided by any applicable statute of limitations, no delay or omission on Creditor's part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will Creditor's action or inaction impair any such right or power. Creditor's rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which Creditor may have under other agreements with Guarantor, at law or in equity.

9. Illegality. In case any one or more of the provisions contained in this Guaranty should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

10. Amendments. No modification, amendment or waiver of any provision of this Guaranty nor consent to any departure by Guarantor therefrom, will be effective unless made in a writing signed by Creditor, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on Guarantor in any case will entitle Guarantor to any other or further notice or demand in the same, similar or other circumstance.

11. Entire Agreement. This Guaranty (including the documents and instruments referred to herein) constitutes the entire agreement and supersedes all other prior agreements and understandings, both written and oral, between Guarantor and Creditor with respect to the subject matter hereof.

12. Successors and Assigns. This Guaranty will be binding upon and inure to the benefit of Guarantor and Creditor and their respective successors and permitted assigns. Neither party may assign this Guaranty in whole or in part without the other's prior written consent, which consent will not be unreasonably withheld or delayed, except that Creditor may at any time assign this Guaranty without Guarantor's consent, in the same manner, on the same terms and to the same persons as Creditor assigns the DSMA in accordance with Section 163 of the DSMA, and except that this Section 12 shall not limit Guarantor's right to assign this Guaranty, along with substantially all of Guarantor's assets and business to a successor entity or Affiliate that assumes all obligations thereunder and (i) where the successor Guarantor's Lowest Credit Rating is equal to or greater than Guarantor's Lowest Credit Rating or where the successor Guarantor's Lowest Credit Rating is equal to or greater than BBB-, as rated by S&P or Fitch, or Baa3, as rated by Moody's, and (ii) Seller is in compliance the DSMA. The "Lowest Credit Rating" shall mean the lowest of the senior unsecured long-term debt ratings determined by Moody's Investor Services, Inc. (or its successor) ("Moody's"), the Standard & Poor's Rating Group, a division of McGraw-Hill, Inc., (or its successor) ("S&P"), or Fitch Investor Service, Inc. (or its successor) ("Fitch") immediately before such transfer and assumption. Upon any such delegation and assumption of obligations by a successor Guarantor, Guarantor shall be relieved of and fully discharged from all of its obligations hereunder, whether such obligations arose before or after the date of such delegation and assumption.

13. Interpretation. In this Guaranty, unless Creditor and Guarantor otherwise agree in writing, the singular includes the plural and the plural the singular; references to statutes are to be construed as including all statutory provisions consolidating, amending or replacing the statute referred to; the word "or" shall be deemed to include "and/or", the words "including", "includes" and "include" shall be deemed to be followed by the words "without limitation"; and references to sections or

exhibits are to those of this Guaranty unless otherwise indicated. Section headings in this Guaranty are included for convenience of reference only and shall not constitute a part of this Guaranty for any other purpose.

14. Governing Law.

(a) This Guaranty has been delivered to and accepted by the Creditor. THIS GUARANTY WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF CREDITOR AND GUARANTOR DETERMINED IN ACCORDANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA, EXCLUDING ITS CONFLICT OF LAWS RULES.

(b) Guarantor hereby irrevocably consents to the jurisdiction of the federal district court for the Western District of Pennsylvania or to the county court jurisdiction of the Allegheny County Court of Common Pleas; provided that nothing contained in this Guaranty will prevent Creditor from bringing any action, enforcing any award or judgment or exercising any rights against Guarantor individually, against any security or against any property of Guarantor within any other county, state or other foreign or domestic jurisdiction. Guarantor acknowledges and agrees that the venue provided above is the most convenient forum for both Creditor and Guarantor. Guarantor waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Guaranty.

15. WAIVER OF JURY TRIAL. GUARANTOR AND CREDITOR IRREVOCABLY WAIVE ANY AND ALL RIGHT TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS GUARANTY, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS GUARANTY OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. GUARANTOR AND CREDITOR ACKNOWLEDGE THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

16. Term. This Guaranty shall survive termination of the DSMA and remain in full force and effect until all amounts due hereunder, including all of the Obligations, have been paid or performed in full.

17. Stay of Acceleration Ineffective with Respect to Guarantor. If acceleration of the time for payment of any amount payable by Seller under the DSMA is stayed upon the insolvency, bankruptcy or reorganization of Seller, all such amounts otherwise subject to acceleration or required to be paid upon an early termination pursuant to the terms of the DSMA shall nonetheless be payable by Guarantor hereunder on written demand by Creditor.

Guarantor acknowledges that it has read and understood all the provisions of this Guaranty, and has been advised by counsel as necessary or appropriate.

ATTEST:

[Guarantor]

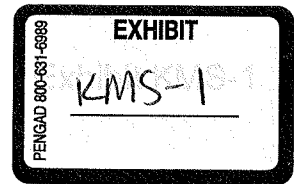
By: _____

Exhibit JP-3

Name: _____

Title: _____

**NOTICE OF INTENT TO PARTICIPATE AS A
CUSTOMER ASSISTANCE PROGRAM SUPPLIER**



Electric Generation Supplier ("EGS") Name:		DUNS Number (One per EGS):	
Contact Name:		Title:	
Email:		Phone:	
Address:	City:	State:	Zip Code:

The submission of this CAP Notice to Duquesne Light Company shall constitute EGS's acknowledgement and acceptance of all terms, conditions and requirements of the CAP Shopping Plan approved by the Pennsylvania Public Utility Commission (the "Commission" or "PUC") at Docket No. P-2020-_____.

In order to provide generation service to Duquesne Light's CAP customers, the EGS agrees to be bound by the following terms:

- 1) The EGS must charge CAP customers at a rate for generation service that is at or below the DLC Price-to-Compare at all times during the contract.
- 2) The EGS may not enter into contracts with CAP customers that impose early cancellation and termination fees or other fees unrelated to service.
- 3) The EGS must comply with all applicable PUC customer notification requirements.
- 4) The EGS must use Duquesne Light's "rate-ready" electric distribution company consolidated billing option for CAP customers.

The undersigned represents and warrants that he or she has the authority to act on behalf of, and to bind the EGS to perform the terms and conditions set for herein.

Signature of Authorized Representative:	Date:
Name:	Title:

Please submit completed form to Duquesne Light Supplier Service Center at DLC_SSC@duqlight.com

Completed forms must be submitted by **May 20** each year for participation in the following DSP IX program year commencing June 1.

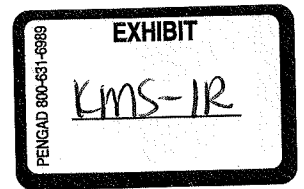


Exhibit KMS-1R

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :
for Approval of a Default Service Plan for the : Docket No. P-2020-3019522
Period June 1, 2021, through May 31, 2025 :

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 1) Reference page 21, lines 7-9 of Mr. Kallaher's direct testimony. Is Mr. Kallaher aware of any electric generation suppliers in Pennsylvania that offer an electric vehicle-specific time-of-use rate or program?

RESPONSE: No.

Provided By: Chris Kallaher

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 2) Reference EGS Parties' response to Question 1. To the extent Mr. Kallaher is aware of any such electric vehicle-specific time-of-use rates or programs, for each such rate or program, please identify:
- a) A brief description of the rate or program;
 - b) The length of time the program or rate has been offered;
 - c) The approximate number of customers enrolled in the rate or program; and
 - d) Whether the rate or program is offered in Duquesne Light's service territory.

RESPONSE: Not applicable.

Provided By: Chris Kallaher

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 3) Reference page 22, lines 5-14 of Mr. Kallaher's direct testimony. Please identify examples of products or programs that meet all of Mr. Kallaher's recommended criteria for the RFI; i.e., the product or program (i) would enhance the development of the EV market, (ii) could be provided by competitive entities, and (iii) could be implemented within the scope of the Company's default service plan.

RESPONSE: I did not have any specific products or programs in mind when I made this suggestion. The purpose of the RFI would be to solicit responses that would describe products or programs that would have those characteristics. One of the points of my testimony is that having the utility propose its own EV TOU rate in the context of its DSP as a means of enhancing the development of the market for EV is that this approach might miss much more effective options that might be available from the competitive market.

Provided By: Chris Kallaher

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 4) Reference page 22, lines 5-14 of Mr. Kallaher's direct testimony. Under Mr. Kallaher's recommendation, who would pay for the costs of the product(s) or program(s) procured through the RFI? How would recovery of such costs be allocated?

RESPONSE: The cost of any EV TOU product procured through the RFI would be paid by the customers who ultimately choose the product.

Provided By: Chris Kallaher

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

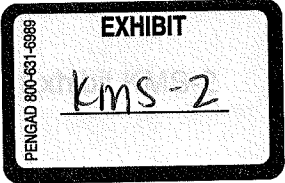
DOCKET NO. P-2020-3019522

- 5) Reference page 22, lines 5-7 of Mr. Kallaher's direct testimony. With respect to the RFI that Mr. Kallaher proposes:
- a) Please identify the entities that Mr. Kallaher believes should be invited to respond to the RFI.
 - b) Did Mr. Kallaher estimate the cost to develop and implement the RFI? If so, provide any cost estimates and any support for those cost estimates.
 - c) Under Mr. Kallaher's recommendation, who would pay for the costs of developing and implementing the RFI? How would recovery of such costs be allocated?

RESPONSE:

- a) I did not envision that any particular entity would be invited to respond to the RFI. I would recommend that the RFI be published in a manner similar to other RFIs and RFPs issued by Duquesne and other Pennsylvania utilities such that entities that might be interested in responding would be likely to see the RFI. At the very least, I would ensure that licensed EGSs providing service in the Duquesne service territory were made aware of the RFI.
- b) I did not estimate the cost to develop and implement the RFI.
- c) I would recommend that the costs of developing and implementing the RFI would be paid in the same manner that the costs of developing and implementing other aspects of the default service plan, such as the proposed EV TOU rate, are recovered. If Duquesne can take that approach to recovering the costs of developing and implementing an EV TOU rate that only Duquesne itself can provide, I see no reason that the same approach could not be taken with respect to a product provided by an entity other than Duquesne.

Provided By: Chris Kallaher



**Duquesne Light Company
 Default Service Plan June 1, 2021 to May 31, 2025
 EV Time of Use Pilot Program
 Marketing and Education Costs**

Item	Cost				
	Year 1	Year 2	Year 3	Year 4	Total
Webpage	\$ 3,000	\$ 500	\$ 500	\$ 500	\$ 4,500
Online Bill Estimate Tool	\$ 50,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 74,000
Bill Insert	\$ 12,250	\$ 12,250	\$ 12,250	\$ 12,250	\$ 49,000
Educational Email	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 4,000
Digital Advertising	\$ 12,000	\$ 14,000	\$ 16,000	\$ 18,000	\$ 54,000
Print Collateral and Event Promoti	\$ 9,350	\$ 9,350	\$ 9,350	\$ 9,350	\$ 37,400
EV TOU Monthly Email Set-up*	\$ 5,000	\$ -	\$ -	\$ -	\$ 5,000
Total	\$ 92,600	\$ 45,100	\$ 47,100	\$ 49,100	\$ 227,900

*Email distribution costs covered through existing subscription

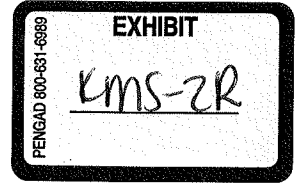


Exhibit KMS-2R

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

OCA I- 10

10. Please provide the current scripts and training materials for used by DLC's third party agent authorized to present, discuss, and market the Standard Offer Referral Program.

Response:

DLC does not currently have a third-party agent authorized to present, discuss, and market the Standard Offer Program.

The Company is proposing to engage with AllConnect to perform these functions.

Based on subsequent discussions with AllConnect regarding SOP scripting, the Company proposes slight modifications to the script that AllConnect would present to customers. This script would read as follows:

*As a customer of **Duquesne Light**, I am pleased to offer you an opportunity to save money on the electricity portion of your utility bill. In Pennsylvania you can choose the company that generates your electricity - also known as your electric generation supplier. To encourage choice, the State Utility Commission has made the Standard Offer Program available to you.*

The Standard Offer Program offers a fixed price of xx cents per kilowatt-hour for one year provided by an Electric Generation Supplier. The fixed Standard Offer Program price provides an initial 7% discount off today's Price to Compare which is xx cents per kilowatt-hour. The Price to Compare will change again on the first of March, June, September and December. The Standard Offer Program price will not change through twelve monthly bills but the Price to Compare could be higher or lower than the Standard Offer Program price during this period.

***Duquesne Light** is still your utility company and is responsible for all your billing and service issues. You will continue to receive only one bill from Duquesne Light. You can cancel this contract anytime without penalty and select another supplier or return to default service with **Duquesne Light** for service at the Price To Compare. I can enroll you with an approved supplier of your choice from our list or I can select one for you. Do you have questions?*

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

OCA I- 10

After answering the customer's questions, AllConnect would then ask:

Do you know a supplier that you would like to select for this program, or would you like me to select one for you from a rotating list?

[Know Supplier or Random Selection]

*I've selected **[Supplier]** as your supplier for the Standard Offer Program, is that ok?*

Did Customer agree to supplier? Y/N

*If Yes: I have initiated the selection of **[Supplier]** as your supplier for the Standard Offer Program. They will send you detailed documentation to you in the mail within the next few days. Depending on your billing cycle, the supplier will begin to show on your Duquesne Light bill within 1 billing cycle.*

Please remember that you should continue to contact Duquesne Light for any questions related to your electric service, regardless of who you choose as a supplier and you can make changes to your supplier selection at any time.

We encourage you to make note of the Price-to-Compare portion of your utility bill monthly and if it goes below what you are paying for electricity through the Standard Offer Program, you can call back to re-enroll in the Program at the lower rate without incurring any penalties or fees.

Natural Resources Defense Council
(NRDC)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl and Emily Phan-Gruber

NRDC Set I-19

19. What metrics or data does the Company intend to use in order to evaluate the success of the pilot EV-TOU program, and does the company envision expanding the program in some fashion at the end of the program's duration (e.g., by offering a TOU rate to additional classes of customers)?

Response:

The Company will look at a range of metrics in order to evaluate the success of the Pilot, including but not limited to:

- Number of EV TOU Pilot Program enrollees over time
- EV TOU Pilot Program customer retention rate
- Customer satisfaction
- EV growth in Duquesne Light service territory
- Share of load shifted to off-peak and shoulder periods by enrolled customers
- Total and average energy consumption per household and premise during peak, off-peak, and shoulder periods
- Customer cost savings

The Company will evaluate the results of the Pilot Program based on these and any other relevant factors that arise during the DSP IX timeframe as part of determining an appropriate path forward for future programs.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 1

1. Online Bill Estimate Tool

- a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to the online bill estimate tool in each year of DSP IX.
- b) Please provide cost breakdown by activity.
- c) Will DLC make an online bill estimate tool available to Small C&I and/or Medium C&I <200 kW customers?

Response:

- a) The Company anticipates purchasing an online bill estimate tool for Residential Customers from a third party vendor. This will involve issuing a solicitation to receive competitive bids for the tool, working with the selected vendor to build the tool, coordinating set-up and integration of the tool with the Company's website, and sharing the tool with customers. For Years 2-4, the Company is anticipating ongoing costs associated with the tool such as updates, maintenance, etc..
- b) Costs by activity are estimated to be:
 - Year 1 – Tool design, set-up and implementation - \$50,000
 - Year 2 – Tool access, maintenance, and minor upgrades/improvements - \$8,000
 - Year 3 – Tool access, maintenance, and minor upgrades/improvements - \$8,000

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV-1

- Year 4 – Tool access, maintenance, and minor upgrades/improvements - \$8,000
- c) The Company does not anticipate making an online bill estimate tool available to Small C&I and/or Medium C&I <200kW customers. The previously described tool will serve Residential customers. The Company will serve and educate C&I customers through direct outreach by its Major Accounts group, the Transportation Electrification team, and engagement with local non-profits and trade industry groups, and will provide information to Small C&I and/or Medium C&I <200 kW customers about the EV TOU Pilot Program through its website.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 2

2. Bill Insert
 - a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to the bill inserts in each year of DSP IX.
 - b) Please provide cost breakdown by activity (e.g. development of the insert, mailing costs).
 - c) Will DLC mail bill inserts to Small C&I and/or Medium C&I <200 kW customers?

Response:

- a) The Company anticipates two main cost-incurring activities for the EV-TOU Rate Pilot bill insert: (1) developing content, designing, and producing the layout for the bill insert; and (2) printing the bill insert. Since the bill insert will be included with the printed bill there will be no additional postage costs.
- b) Annual costs are estimated to be:
 - Content development, design and production - \$1,000
 - Printing - \$11,250
- c) No, the bill inserts will only be included with Residential customer bills.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 3

3. Digital Advertising

- a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to digital advertising (e.g. production of ads, publication/broadcast of ads, ad venues and channels, form of ads) in each year of DSP IX.
- b) Please provide cost breakdown by activity.
- c) Will DLC's digital ads target or reach Small C&I and/or Medium C&I <200 KW customers as well? If not, please describe how DLC will ensure that the ads will target Residential customers only and how DLC can be certain that the ads will not reach Small C&I and/or Medium C&I <200 kW customers.

Response:

- a) The Company has not yet developed a detailed plan for digital advertising for the EV TOU Pilot Program, but anticipates primarily using social media advertising and display ads since those formats allow for optimal direct communication with targeted customer groups. The Company anticipates costs related to the design of the ads, working with marketing/ad placement vendor(s) to help identify the appropriate channels and keywords, and placing the ads.
- b) Average annual costs are estimated to be:
 - o Content development - \$2,000

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 3

- o Digital advertising strategy and placement - \$13,000

- c) The Company's ads will not target Small C&I and/or Medium C&I <200kW customers. The Company will use social media advertising and display ads to target Residential customers within Duquesne Light's service territory and target search terms used by Residential customers, including "home charging", "EV home charging", etc. The Company cannot guarantee that a Small C&I and/or Medium C&I <200kW customer will not see an ad, because Residential customers who view an ad may also own or be affiliated with Small and/or Medium C&I customers as well.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 4

4. Print Collateral and Event Promotion

- a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to print collateral and event promotion in each year of DSP IX.
- b) Please provide cost breakdown by activity.
- c) Will DLC's print collateral and event promotion activities target or reach the Small C&I and/or Medium C&I <200 KW customers? If not, please explain why not and how DLC can be certain of this.
- d) Does DLC expect the print collateral and event promotion activities to impact EV-TOU subscription rate among the Small C&I and/or Medium C&I <200 kW customers? If not, please explain why not and how DLC can be certain of this.

Response:

- a) The Company anticipates three major cost-incurring activities – (1) developing content and design and layout for print collateral materials; (2) printing the collateral; and (3) hiring outside personnel to help staff events. The Company anticipates undertaking these activities in each year of DSP IX.
- b) Average annual costs are estimated to be:
 - o Content development, design, and layout - \$1,750
 - o Printing - \$4,000
 - o Event support - \$3,600

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 4

- c) The Company's print collateral and event promotion activities will not be targeted to Small C&I and/or Medium C&I <200kW customers. The Company will design the print collateral to address Residential customers. Additionally, the Company will attend events that are focused on Residential customers, such as SolarFest or the Pittsburgh Home and Garden Show.
- d) The Company does not expect that print collateral and event promotion activities will materially impact the EV TOU Pilot Program subscription rate among Small C&I and/or Medium C&I <200kW customers, since as noted in response to OCA IV-4(c) above, both the print collateral and events selected will target Residential customers. The Company does not currently plan to promote the EV TOU Pilot Program through print materials or events that are specifically geared toward Small C&I and/or Medium C&I <200 kW customers. As noted in OCA IV-1, Company personnel will conduct outreach to Small C&I and/or Medium C&I <200 kW customers on a more direct, targeted basis, and the Company will provide information targeted to Small C&I and/or Medium C&I <200 kW customers on its website.

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set IV

Witness: Katherine M. Scholl

OCA IV- 5

5. EV-TOU Monthly Email Set-up

- a) Please list and describe in detail all cost-incurring activities DLC proposes to undertake related to EV-TOU Monthly Email Set-up in each year of DSP IX.
- b) Please provide cost breakdown by activity.
- c) Will the Small C&I and/or Medium C&I <200 kW customers receive emails as a result of this monthly email set-up task?

Response:

- a) The Company plans to work with a third-party vendor to design and deploy the EV-TOU monthly email.
- b) The Company anticipates a one-time cost:
 - o Email design - \$5,000Email distribution costs will be covered through an existing subscription.
- c) The Company will send monthly emails to Residential customers and not to Small C&I and/or Medium C&I <200 kW customers.

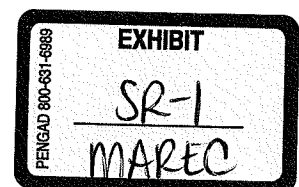
**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition of Duquesne Light Company for :
Approval of Its Default Service Plan for : Docket No. P-2020-3019522
the Period June 1, 2021 through May 31, :
2025**

**SURREBUTTAL TESTIMONY OF
ELIZABETH A. STANTON, PHD**

**On Behalf of the
Intervener MAREC Action**

August 28, 2020



1 **I. INTRODUCTION**

2 **Q. Please state your name, business address, and position.**

3 A. My name is Elizabeth A. Stanton, Ph.D. I am the Director and Senior Economist of the
4 Applied Economics Clinic, 1012 Massachusetts Avenue, Arlington MA 02476.

5 **Q. What is the purpose of your surrebuttal testimony?**

6 A. The purpose of my surrebuttal testimony is to reply to the rebuttal testimonies of:

- 7 • Christopher H. Kallaher on behalf of Interstate Gas Supply, Inc., Shipley Choice
- 8 LLC, NRG Energy, Inc., Vistra Energy Corp., ENGIE Resources LLC, WGL
- 9 Energy Services, Inc., and Direct Energy Services, LLC
- 10 • Serhan Ogur on behalf of the Pennsylvania Office of Consumer Advocate
- 11 • Scott Fisher on behalf of Duquesne Light

12

13 **II. REBUTTAL TESTIMONY OF CHRISTOPHER H. KALLAHER**

14 **Q. Have you reviewed the rebuttal testimony of Christopher H. Kallaher as it relates to**
15 **your direct testimony in this docket?**

16 A. Yes. Mr. Kallaher agrees with my assertion that Duquesne has not provided evidence that
17 its proposed 7 MW of solar is sufficient to result in a prudent mix of resources and that
18 Duquesne has not discussed any analysis performed to determine a prudent mix of
19 resources. Mr. Kallaher also suggests that “Duquesne’s [solar] proposal is mere tokenism
20 rather than a sincere effort to address a proven need.”(p.10, lines12-13) Finally, with
21 regards to my direct testimony, Mr. Kallaher notes that he “generally agree[s] with her
22 demonstration of the potential benefits of incorporating renewables into the grid on a
23 potentially large scale.”(p.10, lines 13-14)

1 **Q. What did the Commission require of EDCs in their DSP proposals with regards to**
2 **long-term contracts for renewables?**

3 A. The Commission requires EDC's to include evidence showing how their DSP proposals
4 provide a prudent mix of supply resources. Specifically, in its Secretarial Letter regarding
5 the Investigation into Default Service and PJM Interconnection, LLC. Settlement
6 Reforms (Docket M-2019-3007101), the Commission references MAREC's comments
7 on long-term contracts for renewables, agreed on the importance of this issue, and
8 requested EDC's address this procurement mechanism in their default service plan (DSP)
9 proposals stating that:

10 Concerning procurement and long-term contracts, the Commission agrees
11 that long-term contracts need to be carefully considered and that we need
12 to consider this topic further in upcoming DSP proceedings. We request
13 that the EDCs include in their filings evidence showing how its DSP
14 proposal complies with the prudent mix requirements of the Public Utility
15 Code [Act 129] and case law.¹

16 **Q. Does Mr. Kallaher agree that Duquesne has failed to meet this obligation?**

17 A. Yes, Mr. Kallaher agrees with this point made in my direct testimony: Duquesne does not
18 provide support for its claim that 7 MW of solar is sufficient to result in a product mix of
19 resources.
20
21

¹ Pennsylvania Public Service Commission ("PUC" or "Commission") Docket No. M-2019-3007101. January 23, 2020. *Secretarial Letter regarding the Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms* ("Secretarial Letter"). Available at: http://www.puc.pa.gov/about_puc/consolidated_case_view.aspx?Docket=M-2019-3007101 p.8

1 **III. REBUTTAL TESTIMONY OF SERHAN OGUR**

2 **Q. Have you reviewed the rebuttal testimony of Serhan Ogur as it relates to your direct**
3 **testimony in this docket?**

4 A. Yes, Mr. Ogur's testimony does not refer directly to my testimony but does address long-
5 term contracts for renewables. In critiquing Mr. Kallaher's direct testimony in this
6 docket, Mr. Ogur argues that long-term contracts do not represent an obstacle to
7 transferring to a new service provider, that claims of risk to customers from locking in a
8 long-term price are spurious, and that the very small size of Duquesne's proposed solar
9 PPA makes it impossible for it to result in other potential dangers to renewables
10 development suggested by Mr. Kallaher. (Mr. Ogur also calls into question whether these
11 purported dangers would be realized with respect to larger scale long-term contracts for
12 renewables.)

13
14 **IV. REBUTTAL TESTIMONY OF SCOTT FISHER**

15 **Q. Have you reviewed the rebuttal testimony of Scott Fisher as it relates to your own**
16 **testimony in this docket?**

17 A. Yes, Scott Fisher's rebuttal addresses my direct testimony in this docket directly, raising
18 several questions and objections. His primary concerns are:

- 19
- That my testimony is not specific enough regarding the number of MWs of
20 renewables for which Duquesne should pursue a long-term contract.
 - That long-term contracts pose a variety of risks to customers including inability to
21 take advantage of potential decreases in generation supply prices, falling
22 renewable development costs, and future retail electric prices.
23

- 1 • That the 2017 study on the benefits to Pennsylvania of long-term renewables
2 contracts oversimplifies actual default service procurement.
- 3 • That my proxy for updating this study overestimates current benefits.
- 4 • That evidence of long-term renewable contracting in other jurisdictions is
5 irrelevant.

6 **Q. Mr. Fisher argues that your testimony is not specific enough regarding the number**
7 **of MWs of renewables for which Duquesne should pursue a long-term contract.**
8 **How do you respond?**

9 A. The number of MWs best procured by Duquesne in long-term contracts should be
10 determined by means of an all-resource RFP that requests bids for both energy and
11 AECs. If, as Mr. Fisher claims on p. 8 of his rebuttal, Duquesne already plans to conduct
12 just such an all-resource RFP for its default supply, then a review of these bids will reveal
13 the optimal amount of long-term renewables to contract for. If, however, Duquesne's
14 RFP is limited in the amount of resources that it is requesting (e.g., limited to 7 MW),
15 then that limited RFP cannot shed light on the optimal amount of long-term renewables
16 contracts to procure. An RFP for 7 MW or smaller bids cannot inform the question of the
17 "right" number of MWs.

18 **Q. How should the Commission assess whether or not an EDC has procured enough**
19 **MW in long-term renewables contracts?**

20 A. As I explained in my direct testimony, the first and best choice is to conduct an all-
21 resource RFP for both energy and AECs, and then using the resulting bids to determine
22 the optimal number and type of MW for which to contract. In the event that such an RFP
23 is not conducted, or the RFP limits responses to an arbitrary, pre-determined number of

1 MWs, there is no standard for determining the number of MW of long-term renewables
2 that will most benefit utility customers.

3 In the absence of such a standard, I recommend that the Commission provide a minimum
4 percentage threshold for long-term renewables contracts as a share of default service that
5 it finds consistent with its requirement that EDCs show how their DSP proposals provide
6 a prudent mix of supply resources.

7 **Q. Mr. Fisher argues that long-term contracts pose a variety of risks to customers**
8 **including inability to take advantage of potential decreases in: generation supply**
9 **prices, falling renewable development costs, and future retail electric prices. How do**
10 **you respond?**

11 A. Mr. Fisher paints a worst-case picture of future market conditions and neglects to
12 mention the risks to Duquesne's customers of missing out on the advantage of today's
13 long-term renewable contracts. In his rebuttal testimony, Mr. Ogur—writing on behalf of
14 Pennsylvania's Office of Consumer Advocate—critiques the use of these same
15 unsubstantiated points in Mr. Kallaher's direct testimony, stating:

16 [W]hile it is certainly possible that long-term contracts may turn out to be
17 uneconomic over the course of the delivery period relative to then-
18 prevailing market prices, it is just as possible that the contracts turn out to
19 be below market over the course of the delivery period. What is relevant
20 here is that the future market prices for energy, solar AECs, or capacity
21 are not known. Therefore, long-term solar PPAs for energy and AECs, and
22 possibly for capacity and ancillary services attributes as well, operate as a
23 hedge against large price increases during the term of the contract, not

1 necessarily as a means to secure the lowest possible price at any particular
2 time. In fact, the Commission supports this view by giving EDCs the
3 flexibility to include long-term products in their default service product
4 portfolios.(p.9, lines 3-12)

5 In short: long-term contracts provide important customer benefits as a hedge on future
6 uncertainties, not by guaranteeing that they provide the lowest price on every day or in
7 every contract period over the year-long term of the contract, but rather by providing a
8 guarantee of a stable, known price over the long term.

9 **Q. Do long-term renewables contracts put customers at risk?**

10 A. No, the inclusion of long-term renewables contracts in default service supply lowers
11 customer risk; it does not increase customer risk. Because the future is uncertain, risk can
12 only be lowered through diversification of investments and commitments. Long-term
13 renewables contracts provide a hedge against both price volatility and increasing prices
14 over time.

15 **Q. Mr. Fisher argues that the 2017 study on the benefits to Pennsylvania of long-term**
16 **renewables contracts oversimplifies actual default service procurement. How do you**
17 **respond?**

18 A. Mr. Fisher is correct that the 2017 study provides a simple, illustrative comparison of
19 long-term renewable PPAs versus default supply. The choice of undertaking a high-level
20 policy study has several benefits over detailed modeling more rooted in the admittedly
21 complex nuances of Pennsylvania's default supply regulation. Illustrative policy
22 modeling permits the possibility that current regulation could—and perhaps must—
23 change in order to accommodate new ideas, new opportunities, and increasingly

1 important environmental values and requirements. Regulation can and should be adapted
2 to best serve current and future customer needs.

3 **Q. What can be learned from the 2017 study?**

4 A. The results of the 2017 study are best interpreted as indicative of possible routes to and
5 sources of benefits to customers. From this initial assessment, we observe that long-term
6 renewable contracts: (1) have the potential to lower customer costs under the right
7 circumstances; (2) provide costs with respect to default service that are lower when the
8 terms of the contract are longer; and (3) provide costs with respect to default service that
9 are lower when the price of natural gas is higher.

10 **Q. Mr. Fisher argues that your proxy for updating the 2017 study overestimates**
11 **current benefits. How do you respond?**

12 A. Mr. Fisher correctly points out an error in my proxy for updating the 2017 study but my
13 error did not overestimate current benefits. On the contrary, my error underestimated
14 current benefits: solar and wind prices have been falling even more rapidly than
15 procurement auction prices than I suggested in my direct testimony.

16 Mr. Fisher is correct in pointing out that I neglected to adjust auction price for the effects
17 of inflation. In the attachment to my testimony, I correct this error: I stated in my direct
18 testimony that “On average, Pennsylvania procurement auction prices fell by roughly 6
19 percent per year from 2015 to 2020”(p. 14, lines 14-15). In fact, real (inflation-adjusted)
20 procurement auction prices fell by nearly 8 percent per year over that period.

21 In my direct testimony, I compared the average annual change in inflation-adjusted wind
22 and solar prices from 2016 to 2019 to that of nominal auction prices from 2015 to 2020.

1 Adjusting the auction growth rates to match the period of data available for renewables
2 prices provided the following, corrected, comparison:

- 3 • From 2016 to 2019, inflation-adjusted Pennsylvania procurement auction
4 prices fell by about 1.5 percent
- 5 • From 2016 to 2019, inflation-adjusted average overnight solar prices fell by
6 11-13 percent
- 7 • From 2016 to 2019, inflation-adjusted average overnight wind prices fell by 6
8 percent

9 Solar and wind prices appear to be dropping more quickly than auction prices over the
10 period for which there are comparable data.

11 **Q. Mr. Fisher argues that evidence of long-term renewable contracting in other
12 jurisdictions is irrelevant. How do you respond?**

13 A. I disagree. I believe that by taking advantage of the experience of other jurisdictions,
14 Pennsylvania gains more practical information about how to provide customer benefits
15 while meeting environmental regulations.

16 **Q. Are other jurisdictions finding ways to adapt current regulations and introduce new
17 regulations to make the benefits of long-term renewables contracts accessible to
18 utility customers?**

19 A. Yes. See my direct testimony beginning on page 20.

20 **Q. Are there any additional examples of long-term contracts being adopted in other
21 jurisdictions?**

22 A. Yes. Washington DC has signed several solar and wind PPAs since 2015, with 12 MW of
23 solar PV purchases that are expected to save taxpayers \$30 million, along with wind

1 PPA's projected to save taxpayers an additional \$45 million over a 20-year period.² The
2 PPA's are projected to accelerate DC towards the goal of cutting greenhouse gas
3 emissions in half by 2032 and achieving carbon neutrality by 2050.³

4 Illinois Power Agency has a long-term renewable resources procurement plan established
5 to create a set of competitive procurements of renewable energy for their RPS
6 compliance obligations.⁴ The plan calls for new photovoltaic distributed generation and
7 community solar projects up to 2000 kW through 15-year contracts.⁵

8 Amphitheater Public Schools in Arizona entered a 25-year Solar Services Agreement
9 (SSA) in which the school district will pay a flat cost per kilowatt hour for the energy
10 produced by their newly installed solar array.⁶ These systems are projected to provide an
11 estimated \$23 million in cost-savings to taxpayers.⁷

12 **Q. Are there any additional examples of long-term contracts being adopted by**
13 **organizations within Pennsylvania?**

14 **A.** Yes. As discussed in my direct testimony beginning on p. 20, the City of Philadelphia
15 signed a long-term contract for an 80 MW solar project in Adams County, which is now

² DC Department of General Services. No date. "Renewables + Energy Purchasing". Available at:
<https://dgs.dc.gov/page/renewables-energy-purchasing>

³ Ibid.

⁴ Illinois Power Agency. April 20, 2020. Long-Term Renewable Resources Procurement Plan. Final Revised Plan.
p.1. Available at: https://www2.illinois.gov/sites/ipa/pages/renewable_resources.aspx

⁵ Illinois Power Agency. April 9, 2020. Adjustable Block Program REC Contract Request for Stakeholder
Comments. pp.1,8. Available at:

<https://www2.illinois.gov/sites/ipa/Documents/ABP%20REC%20Contract%20Update%202020/IL%20ABP%20REC%20Contract%20Request%20for%20Comments%209%20APR%202020.pdf>

⁶ Amphitheater Public Schools. No date. "Amphi Schools Soak Up Solar Energy", Available at:
<https://www.amphi.com/Page/8184>

⁷ Ibid.

1 expected to meet 22 percent of the city's energy demand instead of 20 percent as
2 originally forecast.⁸

3 **Q. Does this conclude your direct testimony?**

4 A. Yes.

⁸ City of Philadelphia and Adams County. March 30, 2020. "Adams County, PA Solar Project – Pre-Qualification". Philadelphia Energy Authority. Available at: https://philaenergy.org/public_bids/adams-county-pa-solar-project-pre-qualification/

Docket No. P-2020-3019522
Attachment B: Direct Testimony of Elizabeth A. Stanton

Applied Economics Clinic
www.aeclinic.org

Primary Contact: Elizabeth A. Stanton, PhD
liz.stanton@aeclinic.org



Last Updated: July 16, 2020

Table of Contents	
Tab Name	Description
Solar Cost Comparison	Analysis of Lazard's Solar LCOEs compared to Solar PPA as
Wind Cost Comparison	Analysis of Lazard's Wind LCOEs compared to Wind PPA as
Auction Prices by Sector	Summary of average auction price by sector
Auction Prices by Utility	Summary of average auction price by utility
AEO Gas Price Forecasts	Comparison of different AEO references and years
Library	Underlying assumptions and data conversion information

Historical CPI-U (1968-2019)
AEO 2017-2020 Delivered Prices
Auction Results

tanton, PhD

emics Clinic
Environment and Equity

assumptions
assumptions

Figures and Tables	Data
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Auction Prices by Sector

	Jan - June 2015	July - Dec 2015	Jan - June 2016	July - Dec 2016	Jan - June 2017
Residential	\$ 64.45	\$ 57.76	\$ 50.43	\$ 53.42	\$ 55.50
Commercial	\$ 66.95	\$ 61.13	\$ 53.02	\$ 58.66	\$ 56.23
Industrial	\$ 22.18		\$ 13.50		
Large Commercial & Industrial	\$ 5.14		\$ 3.54		\$ 2.07
Medium Commercial	\$ 57.65	\$ 67.06			
Medium Commercial & Industrial	\$ 52.14	\$ 51.85	\$ 43.22	\$ 47.22	\$ 47.56
Small Commercial	\$ 60.86	\$ 58.60	\$ 47.28	\$ 51.08	\$ 51.57
Small Commercial & Industrial	\$ 66.50	\$ 57.80	\$ 45.84	\$ 52.84	\$ 51.35
Average Price (Nominal)	\$ 49.48	\$ 59.03	\$ 36.69	\$ 52.64	\$ 44.05
Average Price (Real 2019\$)	\$ 53.37	\$ 63.67	\$ 39.08	\$ 56.07	\$ 45.94

Average Price					
July - Dec 2017	Jan - June 2018	July - Dec 2018	Jan - June 2019	July - Dec 2019	Jan - June 2020
\$ 53.46	\$ 55.36	\$ 53.40	\$ 51.12	\$ 48.88	\$ 46.84
\$ 59.16	\$ 55.70	\$ 58.39	\$ 52.61	\$ 55.54	\$ 46.37
	\$ 1.86		\$ 1.97		\$ 3.10
\$ 50.45	\$ 50.27	\$ 58.65	\$ 45.43		
\$ 49.79	\$ 52.43	\$ 51.04	\$ 48.07	\$ 47.32	\$ 45.89
\$ 51.11	\$ 48.16	\$ 53.39	\$ 43.38	\$ 44.55	\$ 35.78
\$ 52.79	\$ 43.96	\$ 54.97	\$ 40.43	\$ 49.07	\$ 35.59
\$ 55.06	\$ 44.76	\$ 55.97	\$ 40.43	\$ 49.07	\$ 35.59

2015
Annual Perce
-1.

2019
nt Change (%)
5%

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition of Duquesne Light Company for :
Approval of Its Default Service Plan for :
the Period June 1, 2021 through May 31, : Docket No. P-2020-3019522
2025**

**DIRECT TESTIMONY OF
ELIZABETH A. STANTON, PHD**

**On Behalf of
Intervener MAREC Action**

July 17, 2020

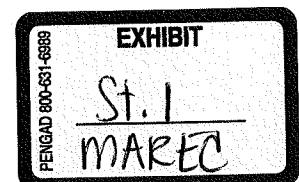


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1 **I. INTRODUCTION**

2 **Q. Please state your name, business address, and position.**

3 A. My name is Elizabeth A. Stanton, Ph.D. I am the Director and Senior Economist of the
4 Applied Economics Clinic, 1012 Massachusetts Avenue, Arlington MA 02476.

5 **Q. Please summarize your work experience and educational background.**

6 A. I am the founder and Director of the Applied Economics Clinic, a non-profit consulting
7 group. The Applied Economics Clinic (“the Clinic”) provides expert testimony, analysis,
8 modeling, policy briefs, and reports for public interest groups on the topics of energy,
9 environment, consumer protection, and equity. The Clinic provides training to the next
10 generation of expert technical witnesses and analysts through applied, on-the-job
11 experience for graduate students in related fields and works proactively to support
12 diversity among both student workers and professional staff.

13 I am a researcher and analyst with more than 19 years of professional experience as a
14 political and environmental economist. I have authored more than 140 reports, policy
15 studies, white papers, journal articles, and book chapters as well as more than 40 expert
16 comments and oral and written testimony in public proceedings on topics related to
17 energy, the economy, the environment, and equity. My articles have been published in
18 Ecological Economics, Climatic Change, Environmental and Resource Economics,
19 Environmental Science & Technology, and other journals. I have also published books,
20 including Climate Change and Global Equity (Anthem Press, 2014) and Climate
21 Economics: The State of the Art (Routledge, 2013), which I co-wrote with Frank

1 Ackerman. I am also co-author of Environment for the People (Political Economy
2 Research Institute, 2005, with James K. Boyce) and co-editor of Reclaiming Nature:
3 Worldwide Strategies for Building Natural Assets (Anthem Press, 2007, with Boyce and
4 Sunita Narain).

5 My recent work includes Integrated Resource Plan (IRP) and Demand-Side Management
6 (DSM) planning review, analysis and testimony of state climate laws as they relate to
7 proposed capacity additions, and other issues related to consumer and environmental
8 protection in the electric and gas sectors.

9 In my previous position as a Principal Economist at Synapse Energy Economics, I
10 provided expert testimony in electric and gas sector dockets, and led studies examining
11 environmental regulation, cost-benefit analyses, and the economics of energy efficiency
12 and renewable energy. Prior to joining Synapse, I was a Senior Economist with the
13 Stockholm Environment Institute's (SEI) Climate Economics Group, where I was
14 responsible for leading the organization's work on the Consumption-Based Emissions
15 Inventory (CBEI) model and on water issues and climate change in the western United
16 States. While at SEI, I led domestic and international studies commissioned by the United
17 Nations Development Programme, Friends of the Earth-U.K., and Environmental
18 Defense Fund, among others.

19 I earned my Ph.D. in economics at the University of Massachusetts-Amherst, and have
20 taught economics at Tufts University, the University of Massachusetts-Amherst, and the
21 College of New Rochelle, among other colleges and universities. My curriculum vitae is
22 attached to this testimony as Attachment A.

1 Q. On whose behalf are you testifying in this proceeding?

2 A. I am testifying on behalf of MAREC Action.

3 Q. Have you previously testified in any formal hearings before regulatory bodies?

4 • A. Yes. I have submitted expert testimony and comments in dockets in Florida, Illinois,
5 Indiana, Louisiana, Massachusetts, Minnesota, New Hampshire, New York, and Vermont as
6 well as several federal dockets. Our study, entitled Pennsylvania Long Term Renewable
7 Contracts Benefits and Costs was an attachment to MAREC's Comments to the
8 Commission's Order entered February 26, 2017 in *Investigation Into Default Service and*
9 *PJM Interconnection, LLC Settlement and Reform* at Docket No. M-2019-3007101.

10 Q. What is the purpose of your direct testimony?

11 A. The purpose of my testimony is to discuss the benefits of long-term contracts for
12 renewables in the context of Duquesne Light's DSP Proposal.

13 **II. COMMISSION'S ORDER REGARDING LONG-TERM RENEWABLES**
14 **CONTRACTS**

15 Q. Has the Pennsylvania Public Utility Commission ("PUC" or "Commission") issued
16 any orders or recommendations regarding EDC procurement of long-term
17 contracts for renewables?

18 A. Yes. In its Secretarial Letter regarding the Investigation into Default Service and PJM
19 Interconnection, LLC. Settlement Reforms (Docket M-2019-3007101), which I
20 previously referenced, the Commission references MAREC's comments on long-term
21 contracts for renewables, agreed on the importance of this issue and requested EDC's

1 address this procurement mechanism in their default service plan (DSP) proposals stating
2 that:

3 Concerning procurement and long-term contracts, the Commission agrees
4 that long-term contracts need to be carefully considered and that we need
5 to consider this topic further in upcoming DSP proceedings. We request
6 that the EDCs include in their filings evidence showing how its DSP
7 proposal complies with the prudent mix requirements of the Public Utility
8 Code [Act 129] and case law.¹

9 **Q. In its Petition for approval of its DSP, does Duquesne Light intend to enter into any**
10 **long-term renewables contracts?**

11 A. Yes, Duquesne Light intends to enter into a long-term solar power purchase agreement
12 (PPA) during the DSP program term of June 1, 2021 to May 31, 2025. As stated in the
13 Petition:

14 Duquesne Light intends to enter into a long-term Solar PPA (i.e., more
15 than four years and less than twenty years) to support a utility-scale solar
16 project (up to a total of 7 MW) in Pennsylvania, preferably in Duquesne
17 Light's service area.²

18 The Company states that the "alternative energy credits ("AECs") associated with this
19 project (or projects up to the 7 MW cap) would be used to help satisfy the solar
20 requirements of serving all default service customers."³

¹ Pennsylvania Public Utility Commission ("PUC" or "Commission") Docket No. M-2019-3007101. January 23, 2020. *Secretarial Letter regarding the Investigation into Default Service and PJM Interconnection, LLC. Settlement Reforms* ("Secretarial Letter"). Available at: http://www.puc.pa.gov/about_puc/consolidated_case_view.aspx?Docket=M-2019-3007101 p.8

² Duquesne Light Petition. ¶ 54.

³ Davis, C.J. April 20, 2020. *Direct Testimony of C. James Davis*. Testimony before the Pennsylvania Public Utility Commission on behalf of Duquesne Light Company. Docket No. P-2020-3019522. Available at: http://www.puc.pa.gov/about_puc/consolidated_case_view.aspx?Docket=P-2020-3019522 p.14.

1 **Q. Why does Duquesne Light seek to support utility-scale solar facilities in**
2 **Pennsylvania through a long-term solar PPA?**

3 A. Duquesne Light seeks to support utility-scale solar facilities in Pennsylvania through a
4 long-term solar PPA to be consistent with the “prudent mix” and “least cost”
5 requirements of Act 129. The Company also is considering a long-term solar PPA since it
6 has the potential to “provide greater opportunity for cost-effective financing for the
7 developer of a utility-scale solar project.”⁴ Duquesne Light also notes how the
8 development of solar facilities addresses requirements set out by the Alternative Energy
9 Portfolio Standards:

10 The development of solar facilities is consistent with Act 129’s objectives,
11 as it addresses the Alternative Energy Portfolio Standards (“AEPS”)
12 “prudent mix” and “least cost” requirements.⁵

13 **Q. What process will Duquesne follow to obtain a long-term solar PPA?**

14 A. In accordance with the requirements of Act 129, Duquesne Light plans to conduct a
15 competitive solicitation for the PPA. The results of the competitive solicitation would be
16 reported to the Commission consistent with the process used for the Company’s other
17 default service supply auctions. The Commission would have the opportunity to review
18 the results and approve or reject the competitive solicitation outcome.⁶

⁴ Duquesne Light Petition. ¶ 55.

⁵ *Direct Testimony of C. James Davis*, Docket No. P-2020-3019522, p.14.

⁶ Duquesne Light Petition. ¶ 57.

1 **Q. Does Duquesne plan to purchase the associated energy provided by the solar**
2 **facility?**

3 A. Yes, Duquesne plans to purchase the associated energy from the solar facility. The
4 Company wants to provide greater opportunity for cost-effective financing for developers
5 of utility-scale solar projects and believes that a PPA that includes energy may be the best
6 means to do so. In addition to purchasing the associated energy, the Company “intends to
7 assess the potential of purchasing the associated capacity and ancillary services from the
8 facility.”⁷

9 **Q. What is required of electric utilities by Pennsylvania’s Alternative Energy Portfolio**
10 **Standards Act of 2004?**

11 A. By 2021, Pennsylvania’s Alternative Energy Portfolio Standards Act of 2004 (AEPS)
12 requires the Commonwealth’s electric distribution companies (EDC) to purchase Tier I
13 AECs equal to 8 percent of their retail sales, and Tier II AECs equal to an additional 10
14 percent of their retail sales. At present, Pennsylvania EDCs purchase renewable
15 generation and the “AECs” associated with it at procurement auctions every six months.

16 **Q. How does Duquesne Light’s proposed PPA for solar compare to the Company’s**
17 **obligations to obtain AECs?**

18 A. According to Duquesne Light’s proposed DSP, the Company’s total load (or retail sales)
19 amounted to 7,342 GWh in 2019.⁸ By 2021, Duquesne Light will be required to purchase
20 Tier I AECs equal to 8 percent of their retail sales, which is roughly equal to 587 GWh.

⁷ Duquesne Light Petition. ¶ 56.

⁸ Ogden, D.B. April 20, 2020. *Direct Testimony of David B. Ogden*. Exhibit DBO-4. Testimony before the Pennsylvania Public Utility Commission on behalf of Duquesne Light Company. Docket No. P-2020-3019522. Available at: http://www.puc.pa.gov/about_puc/consolidated_case_view.aspx?Docket=P-2020-3019522

1 Using Lazard’s solar capacity factor of 32 percent, Duquesne Light’s proposed solar PPA
2 of 7 MW is equivalent to approximately 20 GWh, which amounts to only 3 percent of the
3 Company’s 2021 AEC obligation of 587 GWh.⁹

4 **Q. Please describe the standards used for Duquesne Light’s procurement**
5 **methodologies.**

6 A. Duquesne Light’s procurement methodologies under its DSP are based upon the
7 standards set forth by Act 129. These standards require that “electric power acquired shall
8 be procured through competitive procurement processes” and the procurement plan must
9 include a “prudent mix” of spot market purchases, short-term contracts and long-term
10 contracts.¹⁰ These standards also specify that the prudent mix of contracts must be “the
11 least cost to customers over time”.¹¹

12 **Q. In its Petition for approval of its DSP, what does Duquesne Light claim regarding a**
13 **prudent mix of contracts?**

14 A. In its Petition, Duquesne Light claims to achieve a prudent mix of contracts for its DSP
15 and satisfy the requirement that this mix is “the least cost to customers over time”:

16 [T]his Plan includes a prudent mix of contracts given the current levels of,
17 and experience with, switching for each class of customers, and the
18 competitive market enhancements proposed in the Petition.¹²

⁹ Lazard. November 2019. *Levelized Cost of Energy Analysis 13.0*. pp.16-17. Available at: <https://www.lazard.com/perspective/lcoe2019>

¹⁰ 66 Pa.C.S. 2807(e)(3.1-3.2).

¹¹ 66 Pa.C.S. 2807(e)(3.4).

¹² Pennsylvania Public Utility Commission (“PUC” or “Commission”) Docket No. P-2020-3019522. April 20, 2020. *Petition of Duquesne Light Company For Approval of Default Service Plan For The Period June 1, 2021 Through May 31, 2025*. Submitted by Duquesne Light Company (“Dusquene Light Petition”). Available at: http://www.puc.pa.gov/about_puc/consolidated_case_view.aspx?Docket=P-2020-3019522 ¶ 41

1 **Q. What evidence does Duquesne Light provide to support this claim?**

2 A. Duquesne Light does not appear to provide support for its claim that 7 MW of solar is
3 sufficient to result in a prudent mix of resources. If any analysis was conducted along
4 these lines, the Company did not provide it in its Petition.

5 **Q. Has Duquesne Light conducted any analysis to determine a prudent mix of**
6 **contracts?**

7 A. Duquesne Light does not discuss an analysis to determine a prudent mix of contracts in
8 its Petition.

9 **Q. What would be an appropriate analysis to determine a prudent mix of contracts?**

10 A. An appropriate analysis to determine a prudent mix of contracts would be an all-resource
11 Request for Proposals followed by Integrated Resource Modelling to determine the least-
12 cost mix of resources that meet the Company's other requirements including its AECs
13 obligation.

14 **III. OVERVIEW OF ANALYSIS**

15 **Q. What is the importance for long-term contracts for developers of renewable energy**
16 **projects?**

17 A. Long-term contracts help renewable energy projects get built, often at a lower cost. In
18 recent years, the price of natural gas has been the primary influence on wholesale energy
19 markets, keeping energy prices low and reducing revenues to all generators. As
20 demonstrated by the Brattle Group, new renewable generators can have difficulty

1 financing their projects due to low expected energy revenues and relatively small
2 capacity payments that are not sufficient to cover their costs.¹³

3 Long-term contractual agreements for renewable energy between project developers and
4 electric utilities or local distribution companies provide predictable revenue streams to
5 developers, who tend to be smaller entities lacking ready access to the capital necessary
6 to construct renewable energy projects. A steady, predictable revenue stream helps
7 project developers secure financing from lenders, making possible the construction of the
8 new renewable generation resources needed to meet state mandates for renewables, such
9 as renewable portfolio standards (RPS). According to the Brattle Group's 2013 analysis:

10 [W]ith increased price certainty for a project, investors require a lower
11 return, which in turn reduces the cost of financing for the project, when
12 compared with a project that relies purely on spot market dynamics for
13 revenues.¹⁴

14 **Q. Do long-term renewables contracts benefit consumers?**

15 A. Yes, long-term renewables contracts, as well as the resulting increase in renewable
16 generation, benefit consumers by providing:

- 17 • **Price stability:** Long-term contracts for renewable energy can offer price stability
18 over a multi-year timeframe. Customers are protected from constant rate
19 adjustments during periods when energy and capacity markets are unstable.

¹³ Weiss, Jurgen, and Mark Sarro. 2013. *The Importance of Long-term Contracting for Facilitating Renewable Energy Project Development*. The Brattle Group. p. 7. http://www.brattle.com/system/publications/pdfs/000/004/927/original/The_Importance_of_Long-Term_Contracting_for_Facilitating_Renewable_Energy_Project_Development_Weiss_Sarro_May_7_2013.pdf?1380317003

¹⁴ The Brattle Group. p. 12.

- 1 • **Incentives to renewable development:** Long-term contracts encourage the
2 development of new renewable generation resources by offering increased price
3 certainty and lower financing costs.
- 4 • **Lower renewable energy certificate (REC) prices:** The addition of renewable
5 generators leads to an increase in the availability of RECs. An increase in the
6 supply of RECs helps to lower the price, which in turn reduces the cost of meeting
7 the RPS and benefits ratepayers.
- 8 • **Lower energy costs:** The addition of renewable generation to the wholesale
9 market supply curve displaces the most expensive generating units and lowers the
10 wholesale market price of energy. Utilities dealing directly with developers in a
11 competitive process are able to pass along cost savings (such as lower financing
12 costs) to customers.
- 13 • **Economic development:** In-state development of renewables adds jobs and
14 economic development.
- 15 • **Reduced air pollution:** Displacement of fossil-fired generators with non-emitting
16 renewables leads to a reduction in air emissions and a corresponding increase in
17 health benefits for consumers.

18 **Q. Please describe the analysis conducted by Applied Economics Clinic and Sommer**
19 **Energy, LLC on behalf of the Mid-Atlantic Renewable Energy Coalition.**

20 A. In December 2017, Applied Economics Clinic and Sommer Energy, LLC examined the
21 potential benefits of longer-term contracting of 10 years and 20 years for the renewables
22 needed to meet one-half of Pennsylvania's Alternative Energy Portfolio Standard (AEPS)
23 as compared to the current practice of purchasing renewable generation and associated
24 alternative energy credits (AEC) at procurement auctions every six months.

25 We compared the status quo auction purchasing to costs under long-term power purchase
26 agreement (PPA) contracts for renewables. The difference between the PPA prices and
27 the procurement auction prices is the per kilowatt-hour (kWh) benefit of procuring
28 renewables through long-term contracts. The total dollar value of this benefit is the
29 product of the amount of energy purchased in kWhs and the \$/kWh benefit. The amount

1 of renewables and AECs procured is the same in all scenarios examined in our report,
 2 regardless of natural gas price, length of contract, and whether the purchase is through a
 3 PPA contract or an auction.

4 **Q. Do long-term renewable contracts save money for consumers?**

5 A. Yes, long-term renewable contracts save money for consumers. According to the analysis
 6 conducted by Applied Economics Clinic and Sommer Energy LLC, long-term contracts
 7 to purchase renewables save money for electric consumers. Over a ten-year period from
 8 2018 to 2027, 20-year renewable PPAs for one-half of Pennsylvania’s incremental AEPS
 9 requirement would save ratepayers \$134 to \$331 million (see Table 1, where red text
 10 indicates savings to consumers). These savings estimates do not account for long-term
 11 PPA contracts’ potential to lower spot-market AEC prices. Instead, saving measures are
 12 limited to the result of differences in the price of renewable energy depending on whether
 13 it is purchased at auction or via contract.

14 **Table 1. Net present value difference between PPA and auction costs (million 2016\$)**

		Natural Gas Price Projection		
		Low	Base	High
1/2 Total AEPS	10-year	\$85	\$18	(\$112)
	20-year	(\$134)	(\$201)	(\$331)

15
 16
 17 *Source:* Stanton, E.A., et al. 2017. *Pennsylvania Long-Term Renewables Contracts Benefits and Costs*. Applied
 18 Economics Clinic and Sommer Energy, LLC. Prepared on behalf of the Mid-Atlantic Renewable Energy Coalition.
 19 Available at: <https://aeclinic.org/publicationpages/benefits-of-long-term-renewable-contracts-for-pennsylvania>

1 **Q. Does the advantage of long-term renewables contracts depend on the price of**
 2 **natural gas?**

3 A. Yes, the advantages of long-term renewables contracts depend on the price of natural gas.
 4 Twenty-year PPA contracts are less expensive than auction purchases under any of the
 5 natural gas price scenarios examined, while 10-year contracts were less expensive than
 6 auction purchases under a high natural gas price future.

7 **Q. Does the advantage of long-term renewables contracts depend on the length of the**
 8 **contract?**

9 A. Yes, the advantages of long-term renewables contracts depend on the length of the
 10 contract. Twenty-year PPA contracts are substantially cheaper than 10-year contracts (see
 11 Table 2).

12 **Table 2. Net present value of PPA costs (million 2016\$)**

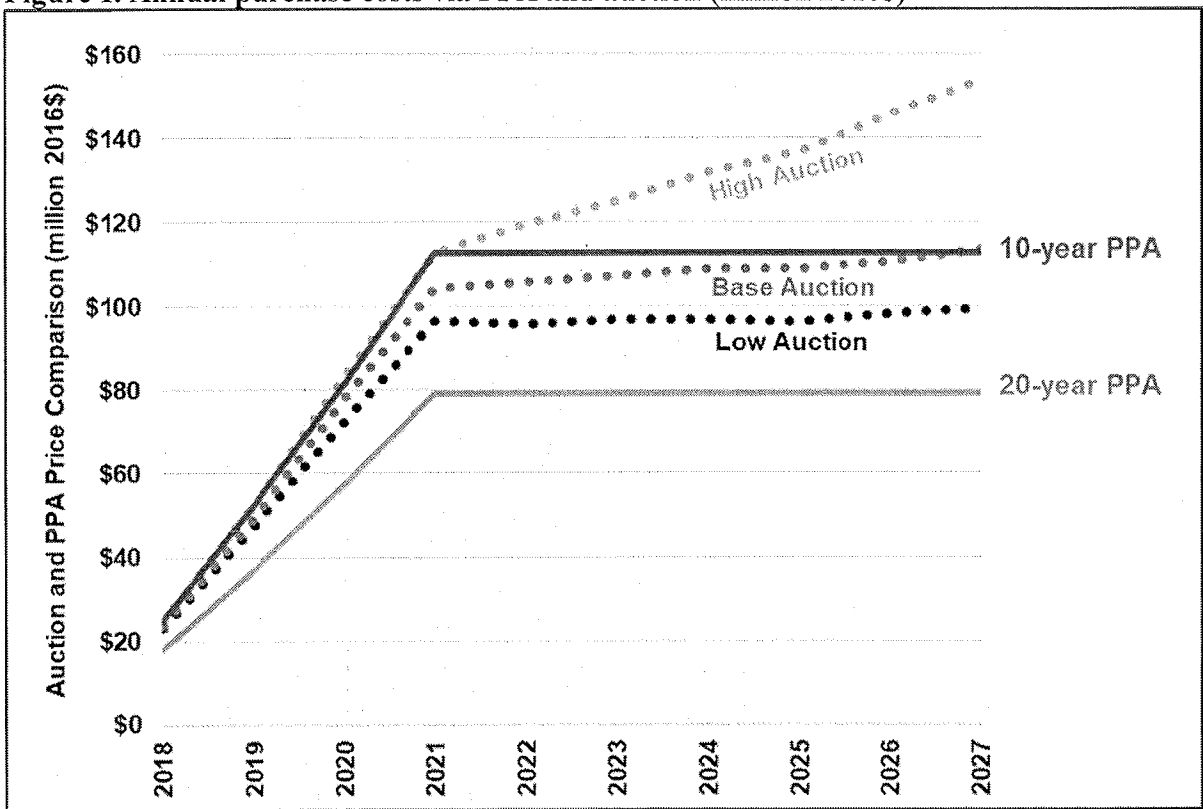
		Natural Gas Price Projection		
		Low	Base	High
1/2 Wind AEPS	10-year		\$647	
	20-year		\$459	
1/2 Solar AEPS	10-year		\$90	
	20-year		\$60	
1/2 Total AEPS	10-year		\$738	
	20-year		\$519	

13
 14
 15 *Source:* Stanton, E.A., et al. 2017. *Pennsylvania Long-Term Renewables Contracts Benefits and Costs*. Applied
 16 Economics Clinic and Sommer Energy, LLC. Prepared on behalf of the Mid-Atlantic Renewable Energy Coalition.
 17 Available at: <https://aeclinic.org/publicationpages/benefits-of-long-term-renewable-contracts-for-pennsylvania>

1 Q. Does the advantage of long-term renewables contracts vary over time?

2 Yes, the advantages of long-term renewables contracts vary over time. Figure 1 presents
3 the annual costs of the PPA and auction purchases themselves (it does not present the
4 difference or “delta” between the two). Throughout the period modeled, the annual costs
5 of the 10-year PPA contracts are within the range of the auction costs. The costs of
6 meeting one-half Pennsylvania’s incremental renewable energy needs using 20-year
7 PPAs are below that of the auction costs, even at the lowest natural gas price predictions.

8 Figure 1. Annual purchase costs via PPA and auction (million 2016\$)



9
10
11 Source: Stanton, E.A., et al. 2017. *Pennsylvania Long-Term Renewables Contracts Benefits and Costs*. Applied
12 Economics Clinic and Sommer Energy, LLC. Prepared on behalf of the Mid-Atlantic Renewable Energy Coalition.
13 Available at: <https://aeclinic.org/publicationpages/benefits-of-long-term-renewable-contracts-for-pennsylvania>

1 **Q. Has the December 2017 Applied Economics Clinic and Sommer Energy, LLC**
 2 **analysis been updated since its original release?**

3 A. No, the analysis conducted by Applied Economics Clinic and Sommer Energy, LLC has
 4 not been updated since its original release in December 2017. Underlying data used in
 5 our December 2017 analysis included forecasted future natural gas prices, capital
 6 investments in wind and solar electric generation, and Pennsylvania’ six-month electric
 7 procurement auction prices available at the time of publication. Predictions of future
 8 prices have changed over the last two and half years, and more up-to-date predictions
 9 could lead to small changes in the results of our analysis.
 10 Although a new economic analysis was not conducted, I have considered how updated
 11 gas prices, renewable capital costs, and procurement auction prices would mostly likely
 12 affect the analysis’ results.

13 **Q. How have procurement auction prices changed since the December 2017 analysis?**

14 A. On average, Pennsylvania procurement auction prices fell by roughly 6 percent per year
 15 from 2015 to 2020 (see Table 4 and Table 5).

16 **Table 4. Procurement auction results, by utility (\$/MWh)**

	Average Price											
	Jan - June 2015	July - Dec 2015	Jan - June 2016	July - Dec 2016	Jan - June 2017	July - Dec 2017	Jan - June 2018	July - Dec 2018	Jan - June 2019	July - Dec 2019	Jan - June 2020	
PECO	\$ 55.42	\$ 63.95	\$ 38.90	\$ 55.35	\$ 44.10	\$ 52.65	\$ 44.67	\$ 54.24	\$ 40.82	\$ 48.81	\$ 38.61	
PPL	\$ 55.01	\$ 57.80	\$ 38.18	\$ 53.36	\$ 42.06	\$ 50.96	\$ 39.60	\$ 54.04	\$ 36.05	\$ 45.60	\$ 29.16	
DLCO	\$ 53.91	\$ 52.81	\$ 44.68	\$ 48.36	\$ 43.60	\$ 50.50	\$ 44.61	\$ 52.89	\$ 39.82			
METED	\$ 61.97	\$ 61.11	\$ 46.09	\$ 55.93	\$ 56.31	\$ 57.68	\$ 54.01	\$ 56.34	\$ 50.86	\$ 55.43	\$ 47.77	
PENLC	\$ 59.05	\$ 57.75	\$ 47.14	\$ 54.18	\$ 53.93	\$ 54.85	\$ 52.43	\$ 53.17	\$ 50.53	\$ 51.84	\$ 46.37	
Penn Power (ATSI)	\$ 73.20	\$ 63.59	\$ 54.49	\$ 61.42	\$ 61.88	\$ 64.43	\$ 64.51	\$ 65.03	\$ 61.34	\$ 59.56	\$ 54.25	
West Penn Power (APS)	\$ 55.31	\$ 53.59	\$ 42.85	\$ 54.00	\$ 52.97	\$ 53.94	\$ 53.03	\$ 52.15	\$ 48.12	\$ 48.34	\$ 41.66	

17 See Attachment B for sources and calculations
 18

Table 5. Procurement auction results, by sector (\$/MWh)

	Average Price											
	Jan - June 2015	July - Dec 2015	Jan - June 2016	July - Dec 2016	Jan - June 2017	July - Dec 2017	Jan - June 2018	July - Dec 2018	Jan - June 2019	July - Dec 2019	Jan - June 2020	
Residential	\$ 64.45	\$ 57.76	\$ 50.43	\$ 53.42	\$ 55.50	\$ 53.46	\$ 55.36	\$ 53.40	\$ 51.12	\$ 48.88	\$ 46.84	
Commercial	\$ 66.95	\$ 61.13	\$ 53.02	\$ 58.66	\$ 56.23	\$ 59.16	\$ 55.70	\$ 58.39	\$ 52.61	\$ 55.54	\$ 46.37	
Industrial	\$ 22.18		\$ 13.50									
Large Commercial & Industrial	\$ 5.14		\$ 3.54		\$ 2.07		\$ 1.86		\$ 1.97		\$ 3.10	
Medium Commercial	\$ 57.65	\$ 67.06										
Medium Commercial & Industrial	\$ 52.14	\$ 51.85	\$ 43.22	\$ 47.22	\$ 47.56	\$ 50.45	\$ 50.27	\$ 58.65	\$ 45.43			
Small Commercial	\$ 60.86	\$ 58.60	\$ 47.28	\$ 51.08	\$ 51.57	\$ 49.79	\$ 52.43	\$ 51.04	\$ 48.07	\$ 47.32	\$ 45.89	
Small Commercial & Industrial	\$ 66.50	\$ 57.80	\$ 45.84	\$ 52.84	\$ 51.35	\$ 51.11	\$ 48.16	\$ 53.39	\$ 43.38	\$ 44.55	\$ 35.78	

See Attachment B for sources and calculations

Q. How have renewable capital costs changed since the December 2017 analysis?

A. Average overnight capital costs for solar and wind fell by 11-13 percent and 6 percent per year, respectively, from 2016 to 2019 (see Table 3). Overnight capital costs are one of the key components driving PPA prices and can be a good indicator of changes in PPA prices.

Table 3. Comparison of renewable capital costs factors

		Utility Scale— Crystalline				Solar PPA
		LAZARD 2016		LAZARD 2019		2017 Analysis
		Low	High	Low	High	Assumptions
Size	MW	30	30	100	100	50
Overnight Capital Cost	2019\$/kW	\$1,545	\$1,385	\$1,100	\$900	\$1,438
Fixed O&M	2019\$/kW-yr	\$13	\$10	\$12	\$9	\$15
Variable O&M	2019\$/MWh	\$0	\$0	\$0	\$0	\$0
Capacity Factor	%	30%	21%	32%	21%	22%
Construction Period	Months	9	9	9	9	12
Economic Lifetime	Years	30	30	30	30	20
Levelized Cost of Energy	2019\$/MWh	\$52	\$65	\$36	\$44	N/A

		Wind— On Shore				Wind PPA
		LAZARD 2016		LAZARD 2019		2017 Analysis
		Low	High	Low	High	Assumptions
Size	MW	100	100	150	150	100
Overnight Capital Cost	2019\$/kW	\$1,332	\$1,811	\$1,100	\$1,500	\$1,491
Fixed O&M	2019\$/kW-yr	\$37	\$43	\$28	\$37	\$57
Variable O&M	2019\$/MWh	\$0	\$0	\$0	\$0	\$0
Capacity Factor	%	55%	38%	55%	38%	35%
Construction Period	Months	12	12	12	12	24
Economic Lifetime	Years	20	20	20	20	20
Levelized Cost of Energy	2019\$/MWh	\$34	\$66	\$28	\$54	N/A

See Attachment B for sources and calculations

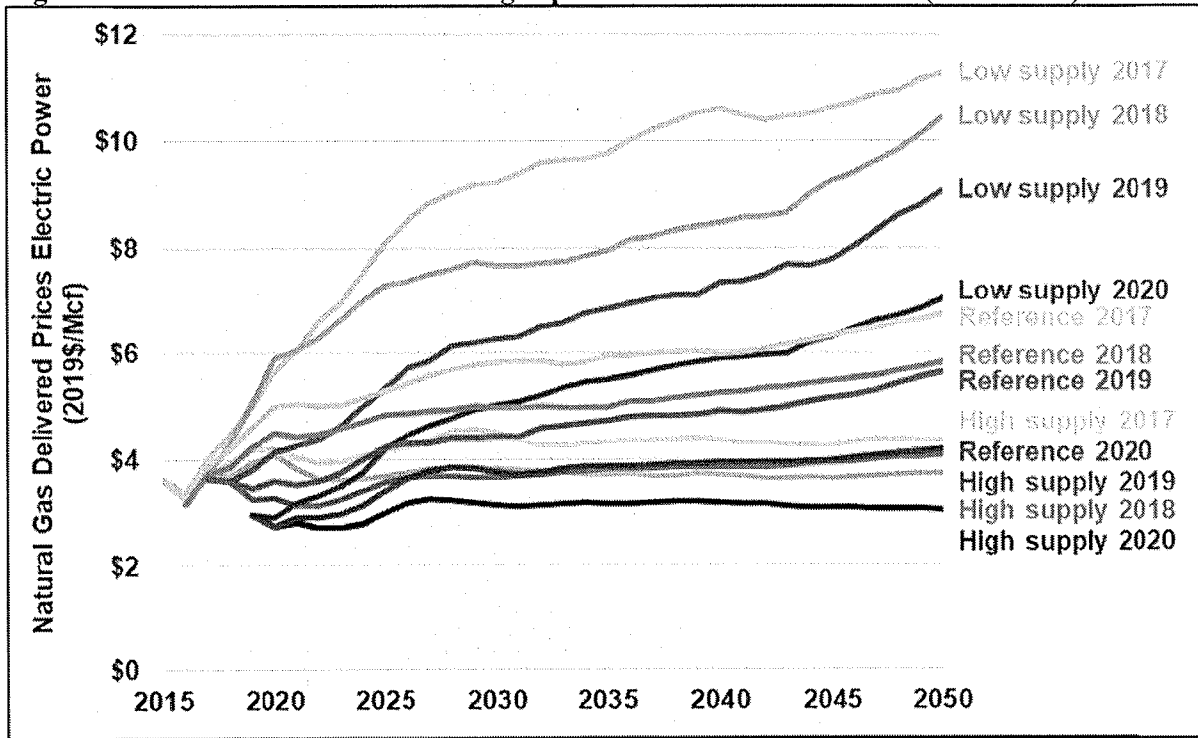
Q. What effect would these updated procurement prices have on the December 2017 analysis?

A. From these simple trends it appears that solar prices are dropping more quickly than those of auction prices, while wind prices are dropping at the same rate. This suggests that the advantage of a solar long-term contract is even greater now than it was in 2017, whereas wind likely maintains the same advantage that it did in 2017.

Q. How have gas price predictions changed since the December 2017 analysis?

A. Gas prices predictions released in 2020 are lower than they were in 2017 (see Figure 2).

1 **Figure 2. EIA AEO delivered natural gas prices for the electric sector (2019\$/Mcf)**



2
3
4 See Attachment B for sources and calculations. *Note:* AEO’s “Low gas and oil” scenario assumes lower gas and oil
5 supply and higher prices, while the “High gas and oil scenario” assumes higher gas and oil supply and lower prices.

6 **Q. What effect would these updated gas prices have on the December 2017 analysis?**

7 A. Lower natural gas prices are the most likely cause of lower auction prices. Solar prices,
8 however, have been dropping even more rapidly, suggesting that an update of the
9 December 2017 analysis would show even more favorable results for renewable PPAs.

10 **IV. OVERVIEW OF LONG-TERM CONTRACTS**

11 **Q. What is the status of long-term renewables contracts in Pennsylvania?**

12 A. Long-term renewables contracts are currently limited in Pennsylvania, and solar sources
13 are mostly small-scale and behind-the-meter. As of April 2020, Pennsylvania holds 90.9

1 MW of utility-scale net summer capacity and 402.2 MW in behind-the-meter capacity.¹⁵
2 According to the Pennsylvania Department of Environmental Protection's (PA DEP)
3 2018 *Solar Future Plan*,¹⁶ independent power producers (IPPs) are having trouble
4 securing long-term contracts due to utilities' stated concerns over ratepayer burden.
5 Utilities have asserted that ratepayers will pay more over time due to flat load growth and
6 stable or declining energy prices. As a result, IPPs are looking elsewhere for investors.
7 According to PA DEP, "Because long-term contracts are often more readily available in
8 other states, IPPs are more likely to obtain investor financing for these projects outside
9 Pennsylvania where the Return on Investment (ROI) is guaranteed for a longer term."¹⁷
10 PA DEP's *Solar Future Plan* discusses strategies to encourage both utility-scale and
11 distributed (behind-the-meter) solar generation. As part of its utility-scale strategies, PA
12 DEP plans to "develop guidelines for the limited use of long-term contracts for 10 or
13 more years to ensure Pennsylvania benefits from grid scale solar," evaluate the pros and
14 cons of utility ownership of solar generation, and investigate opportunities for grid
15 modernization.¹⁸ According to the *Plan*, the Commonwealth could increase utility-scale
16 and distributed solar by 37 times and 2.5 times 2015 levels, respectively.¹⁹

¹⁵ U.S. Energy Information Administration (EIA). June 2020. *Table 6.2.B. Net Summer Capacity Using Primarily Renewable Energy Sources and by State, April 2020 and 2019 (Megawatts)* [Table]. Electric power monthly with data for April 2020. Available at: https://www.eia.gov/electricity/monthly/current_month/epm.pdf

¹⁶ Pennsylvania Department of Environmental Protection (PA DEP). November 2018. *Pennsylvania's Solar Future Plan*. Available at: <http://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/Pollution%20prevention%20and%20Energy%20assistance/SolarFuture/Pennsylvania%27s%20Solar%20Future%20Plan.pdf>.

¹⁷ Ibid.

¹⁸ Ibid. p. xv

¹⁹ Ibid. p. xi

1 **Q. Can municipalities enter into long-term renewables contracts?**

2 A. Yes, municipalities can enter into long-term renewables contracts. According to 2019
3 analysis conducted by Community Energy, a Pennsylvania-based clean energy developer,
4 long-term contracts for renewable projects for small- to medium-sized municipalities
5 contribute to a greener electricity mix in the Commonwealth. Community Energy
6 concluded that total annual demand for power of at least 40 MW is necessary for a PPA
7 to be price competitive. To increase the feasibility of PPAs, therefore, municipalities
8 should collaborate and aggregate their demand to enter into joint long-term contracts for
9 solar projects.²⁰

10 Community Energy also recommends that, due to land constraints, municipalities should
11 consider developing or purchasing an existing project outside their borders, selecting an
12 experienced large-solar developer or project owner with which to collaborate. In addition
13 to contracting for energy in a solar PPA, municipalities also commonly contract for this
14 energy's associated RECS, which can be sold on the market by a municipality, but the
15 municipality cannot then claim credit for generating renewable energy.²¹ Municipalities
16 are not regulated by the Commission and therefore are not required to meet the
17 Commonwealth's Alternative Energy Portfolio Standards.

²⁰ Community Energy. 2019. *White paper: Introduction to off-site solar power purchase agreements for small to medium municipalities in Pennsylvania*. Available at: <https://www.communityenergyinc.com/munippas>.

²¹ Ibid.

1 **Q. What are some examples of existing long-term renewables contracts in**
2 **Pennsylvania?**

3 A. According to an April 2020 article in *Penn Today*, the University of Pennsylvania
4 (UPenn) aims to be 100 percent carbon neutral by 2042. To meet this goal, UPenn signed
5 a long-term contract for the largest solar project in Pennsylvania. The PPA contains two
6 25-year contracts for two new solar facilities in central Pennsylvania. With a combined
7 capacity of 220 MW, the facilities could produce up to 450,000 MWh of annual
8 generation or 75 percent of campus electric demand.²²

9 Similarly, the *Philadelphia Inquirer* reports that four other Pennsylvania schools (Lehigh
10 University, Lafayette College, Muhlenberg College, and Dickinson College) have
11 collectively signed a long-term contract for a 45.9 MW “virtual” share in a solar farm in
12 Texas. Under this virtual PPA, the schools will purchase only the RECs associated with the
13 generation and not the energy.²³

14 According to a 2017 press release, the City of Philadelphia aims to have 100 percent
15 renewable electricity by 2030.²⁴ In 2018, the City signed a long-term contract for an 80
16 MW Community Energy-developed solar project in Adams County, about 140 miles west
17 of Philadelphia. With this contract, the City can meet 20 percent of its energy demand

²² Mott, A. Rizzi, J. April 13, 2020. “Penn signs power purchase agreement for largest solar project in Pennsylvania”. *Penn Today*. Available at: <https://penntoday.upenn.edu/news/penn-signs-power-purchase-agreement-largest-solar-project-pennsylvania>

²³ Maykuth, A. February 24, 2020. “These Pa. colleges are going all in on renewable energy – with a little help from a Texas solar farm.” *The Philadelphia Inquirer*. Available at: <https://www.inquirer.com/business/lehigh-lafayette-muhlenberg-dickinson-sign-solar-supply-agreement-20200224.html>

²⁴ City of Philadelphia Office of Sustainability. September 27, 2017. “City officials launch new efforts to stem climate change.” Available at: <https://www.phila.gov/press-releases/office-of-sustainability/city-officials-launch-new-efforts-to-stem-climate-change/>

1 with renewable electricity. The solar project is now owned by ENGIE, an independent
2 power producer, and will be operational in 2021.²⁵

3 **Q. Does the PJM planning queue include new renewable energy and capacity**
4 **resources?**

5 A. Yes, the PJM planning queue includes 38 GW of new wind (2 GW of which is in
6 Pennsylvania) and 77 GW of utility-scale solar (10 GW of which is in Pennsylvania).²⁶

7 **Q. Does evidence exist from other jurisdictions that support the use of long-term**
8 **contracts for the acquisition of renewable resources to meet renewable portfolio**
9 **standard (RPS) requirements?**

10 A. Yes, evidence from other jurisdictions supports the use of long-term contracts for the
11 acquisition of renewable resources to meet RPS requirements, including actual and
12 proposed long-term renewables contracts in the District of Columbia, Maine, Maryland,
13 Massachusetts, New Hampshire, New Jersey, New York, and through the U.S.
14 Environmental Protection Agency.

15 **Q. Please discuss the long-term renewables contract example from the District of**
16 **Columbia.**

17 A. In April 2019, the Public Service Commission of the District of Columbia (DC PSC)
18 filed an order in Formal Case No. 1017 that established “a pilot program to procure
19 renewable energy through long-term power purchase agreements (‘PPA’) for
20 electricity generated by solar or wind power facilities located within the PJM

²⁵ City of Philadelphia Office of Sustainability. February 6, 2020. “City and ENGIE announce power purchase agreement staffing plan.” Available at: <https://www.phila.gov/2020-02-06-city-and-engie-announce-power-purchase-agreement-staffing-plans/>

²⁶ PJM Interconnection. “New Services Queue.” Available at: <https://www.pjm.com/planning/services-requests/interconnection-queues.aspx>

1 Interconnection region ('PJM') with a target quantity of five (5) percent of the [Standard
2 of Service] load.”²⁷ At the direction of the DC PSC, Potomac Electric Power Company
3 (Pepco) filed a draft Request for Proposals (RFP) on July 31, 2019 for “long-term
4 renewable energy PPAs, including the renewable energy credits ('RECs') associated
5 with the energy...”²⁸

6 In October 2019, DC PSC filed another order to solicit comments from interested parties
7 regarding “the Commission’s long-term renewable energy power purchase agreement
8 pilot program for Standard Offer Service ('SOS'), Potomac Electric Power Company’s
9 ('Pepco' or 'Company') draft request for proposals('RFP'), and the individual Working
10 Group members' comments on the draft RFP.”²⁹ Since the issuance of this order, DC
11 PSC, Pepco, and other stakeholders have conducted multiple rounds of comments and
12 revisions of the draft RFP with the most recent revision being filed by Pepco on May 21,
13 2020. Although not finalized, the draft RFP seeks “one or more wind or solar Facilities
14 for an annual target amount of 154,000 MWh” representing “approximately 5% of Pepco
15 DC Standard Offer Service Load” and notes that “[b]idders may propose a term of
16 agreement that is fifteen (15) years or twenty (20) years.”³⁰

²⁷ Public Service Commission of the District of Columbia (“DC PSC”). *Formal Case No. 1017, In the Matter of the Development and Designation of Standard Offer Service in the District of Columbia (“Formal Case No. 1017”)*, Order No. 19897, released April 12, 2019 (“Order No. 19897”), ¶ 1.

²⁸ Public Service Commission of the District of Columbia. *Formal Case No. 1017*. Order No. 19897, ¶ 35

²⁹ Public Service Commission of the District of Columbia. *Formal Case No. 1017*. Order No. 20232, released October 10, 2019 (“Order No. 20232”), ¶ 1.

³⁰ Public Service Commission of the District of Columbia. *Formal Case No. 1017*. May 29, 2020. *Pepco's drafts of the Request for Proposal and Renewable Energy Purchase Agreement*. Submitted by Potomac Electric Power Company (“Pepco”). Available at: <https://edocket.dcpsc.org/apis/api/filing/download?attachId=103803&guidFileName=52d4a216-982c-4730-b0a2-a5ff024e8136.pdf>

1 **Q. Please discuss the long-term renewables contract example from Maine.**

2 A. In February 2020, the Maine Public Utilities Commission initiated a procurement process
3 through a request for proposals for solar and other renewable distributed generation
4 projects. To qualify for the sale of energy or renewable energy credits, the facility must
5 be a Class 1A resource as described in the *Act to Reform Maine's Renewable Portfolio*
6 *Standard of 2019*.³¹ The procurement terms must be 20-year contracts with transmission
7 and distribution utilities, and contracts for energy alone are preferred by the Commission
8 over renewable energy credits.³²

9 Long-term contracts are requested by the Commission, which releases Requests for
10 Proposals (RFP), resulting in selected bidders entering into contracts with Maine's
11 investor-owned transmission and distribution utilities. In 2017, an energy purchase
12 agreement was enacted between Dirigo Solar, LLC and the electric utilities Central
13 Maine Power Company and Emera Maine for a twenty-year term with two pricing
14 options for solar energy.³³

15 **Q. Please discuss the long-term renewables contract example from Maryland.**

16 A. Long-term contracting for renewable generating resources was proposed by Levitan &
17 Associates in a study prepared for the state of Maryland on the options available to the

³¹ Maine Public Utilities Commission. 2020. "2020 Request for Proposals for the Sale of Energy or Renewable Energy Credits from qualifying Renewable Resources". Available at: <https://www.maine.gov/mpuc/electricity/rfps/class1a2020/>

³² Maine Public Utilities Commission. March 12, 2020. "RPS Procurement Tranche 1" *Bidders Information Session Presentation*. Available at: <https://www.maine.gov/mpuc/electricity/rfps/class1a2020/documents/RPS-Bidders-Information-Session-03-12.pdf>

³³ Maine Public Utilities Commission. December 18, 2017. *Order Approving Agreement*. Docket No. 2015-00026. Available at: https://www.maine.gov/mpuc/electricity/rfps/longterm2015/documents/Dirigo-Solar-2015_00026_Order_12_18_17.pdf.

1 state to restore its influence over electric rates and new generation construction following
2 electricity market restructuring. The study's authors noted that state RPS and other
3 environmental requirements "have made renewable generation resources and demand
4 response more significant components of states' energy plans, but existing competitive
5 markets have proven ill-suited to their development."³⁴ They found that, at the time of the
6 study, wholesale markets encouraged generation owners to maintain the status quo and
7 rewarded persistent capacity shortages, which resulted in higher wholesale prices and
8 jeopardized reliability.³⁵ Levitan & Associates proposed strategic long-term contracts as a
9 solution that would reduce both wholesale market prices and capacity prices, improve
10 reliability, and achieve state environmental goals.

11 Long-term contracting was emphasized as an action that Maryland could take that would
12 allow it the flexibility to tailor resource procurement in a way that met state needs.
13 Contracts that emphasized renewable resources would both diversify Maryland's fuel mix
14 and lower energy and capacity charges in the state through the addition of lower-cost
15 resources in areas where prices were highest. Low cost renewable resources would
16 displace the more expensive fossil-fired units that were setting high wholesale prices
17 during peak periods, resulting in lower Locational Marginal Prices (LMPs) at energy
18 price nodes and leading to lower and more stable retail prices for consumers over time.³⁶

³⁴ Levitan & Associates. 2007. *State Analysis and Survey on Restructuring and Reregulation*. Prepared for Maryland Public Service Commission. Page 1. http://www.psc.state.md.us/wp-content/uploads/KayeScholer_State-Analysis-and-Survey-on-Restructuring-and-Re-Regulation-_11.30.07.pdf

³⁵ Levitan & Associates. Page 75.

³⁶ Levitan & Associates. Page 81.

1 In 2018, the 100 percent Clean Renewable Energy Equity Act was introduced to the
2 Maryland Senate. This Act would establish new state subsidies for solar and onshore
3 wind, and requires utilities to sign long-term contracts with offshore wind providers.³⁷
4 The bill specifically calls for electric companies to enter into long-term contracts
5 beginning in 2021, with terms from 10 to 20 years.³⁸

6 **Q. Please discuss the long-term renewables contract example from Massachusetts.**

7 A. In 2008, electric distribution companies in Massachusetts were required to begin
8 executing long-term PPAs for energy and/or RECs with renewable developers for a term
9 of 10 to 15 years under Section 83 of the Green Communities Act. A 2012 study by
10 Peregrine Energy Group examined whether that long-term contracting requirement had
11 met state goals by facilitating the development, financing, and construction of new
12 renewable energy projects.³⁹ The Massachusetts Department of Public Utilities (MA
13 DPU) was responsible for approval of long-term contracts, and new projects were
14 required to be cost effective to ratepayers, contribute to moderating peak loads, and
15 provide enhanced electric reliability. Following passage of Section 83, five PPAs were
16 executed between renewable project developers and distribution companies.⁴⁰ Renewable

³⁷ Feldman, et. al. February 6, 2018. *Renewable Energy Portfolio Standard Requirements-Standard Offer Service*. State of Maryland OPC. Senate Bill 391. p.2. Available at: <http://opc.maryland.gov/Portals/0/SenateBills/2018%20Senate%20Bills/SB391%20Electric%20Companies%20-%20RPS%20Requirements%20-%20SOS%20Final.pdf?ver=2019-09-10-143134-407>

³⁸ Ibid. p. 3.

³⁹ Peregrine Energy Group. 2012. *Study on Long-Term Contracting Under Section 83 of the Green Communities Act*. Prepared for the Massachusetts Department of Energy Resources. Available at: <http://www.mass.gov/eea/docs/doer/pub-info/long-term-contracting-section-83-green-communitesa-act.pdf>

⁴⁰ Note that four of the five projects were constructed. The fifth, the offshore Cape Wind project, failed to meet contractual deadlines, causing the two distribution utilities with which it had entered a PPA to terminate their contracts.

1 project developers stated that the PPAs “were critically important in their ability to
2 finance and build their projects.”⁴¹

3 The Peregrine study notes that one of the benefits of long-term contracting for
4 renewables is that the projects resulting from those contracts increase the supply of Class
5 1 RECs needed to meet demand under the RPS, thereby reducing REC market prices. A
6 shortage of RECs, conversely, would cause REC prices to move toward the Alternative
7 Compliance Price, resulting in higher rates for customers.⁴² An increase in the amount of
8 renewable energy generation resulting from long-term contracts suppresses the wholesale
9 price of energy; when zero or low variable cost resources are added to the supply curve,
10 the wholesale market clearing price falls in many hours of the year.⁴³

11 Massachusetts’ Act to Promote Energy Diversity, signed into law by Governor Baker in
12 2016, also has a section pertaining to renewable long-term contracts. The law specifies
13 that in order to assist the financing of offshore wind resources in Massachusetts, no later
14 than June 30, 2017, each distribution company must jointly and competitively solicit
15 proposals for offshore wind, and assuming that reasonable proposals are received, the
16 companies must enter into cost-effective long-term contracts.⁴⁴

⁴¹ Peregrine Energy Group. p.4.

⁴² Peregrine Energy Group. p.35.

⁴³ Peregrine Energy Group. p.36.

⁴⁴ The Commonwealth of Massachusetts. July 31, 2016. *An Act to promote energy diversity*. House Bill No. 4568.
Available at: <https://malegislature.gov/Bills/189/House/H4568>. P. 18

1 In 2019, MA DPU approved the contract between offshore wind developer, Vineyard
2 Wind and the states' electric distribution companies.⁴⁵ The order permits Vineyard Wind
3 to develop 800 MW of wind resources near Cape Cod. Local electric companies will
4 purchase 100 percent of the energy and associated RECs over a 20-year period at \$89 per
5 MWh.⁴⁶

6 **Q. Please discuss the long-term renewables contract example from New Hampshire.**

7 A. In 2019, New Hampshire's Senate Bill 167—to create a commission with regard to the
8 acquisition of long-term renewable contracts—was vetoed by Governor Sununu after
9 passing in the House and Senate.⁴⁷ The bill focused on increasing the state's clean energy
10 resources through an official procurement process, which would be determined after
11 conducting a state-commissioned study.⁴⁸

12 In spite of the veto of Senate Bill 167, the state of New Hampshire has commissioned
13 renewable resources amounting to 10.6 GWh per year (10 percent of governmental
14 electric consumption) through a competitive bidding process for a five-year duration.⁴⁹
15 As part of the state's initiative to reduce reliance on fossil fuels per New Hampshire's

⁴⁵ Massachusetts Department of Public Utilities. April 16, 2019. "Department of Public Utilities Approves Offshore Wind Energy Contracts". Available at: <https://www.mass.gov/news/department-of-public-utilities-approves-offshore-wind-energy-contracts>

⁴⁶ Ibid.

⁴⁷ New Hampshire Senate. September 19, 2019. *Senate Bill 167*. Available at: <https://legiscan.com/NH/text/SB167/2019>.

⁴⁸ Ibid.

⁴⁹ U.S. EPA. April 27, 2020. "Green Power Partnership Long-term Contracts". *United States Environmental Protection Agency*. Available at: <https://www.epa.gov/greenpower/green-power-partnership-long-term-contracts>.

1 Energy Conservation Plan, New Hampshire aims to power all government buildings with
2 25 percent renewable energy by 2025.⁵⁰

3 **Q. Please discuss the long-term renewables contract example from New Jersey.**

4 A. In July 2008, New Jersey's Board of Public Utilities issued an order requiring the state's
5 electric distributors to submit plans for purchasing solar RECs (SRECs) through long-
6 term contracts. Some mandatory elements of this requirement within the SREC
7 Registration Program include contract terms of 10-15 years, separate markets for small
8 solar (projects of 0.05 megawatts (MW) or less) and larger projects between 0.05 and 2
9 MW, and an initial 3-year pilot program ending in 2012.⁵¹

10 A 2015 study by Sustainable Energy Advantage examined the potential benefits of using
11 long-term contracts to meet 50 percent of New Jersey's incremental RPS obligation
12 between 2017 and 2025, compared to purchasing 100 percent of required RECs on the
13 spot market.⁵² Sustainable Energy Advantage found that the presence of long-term
14 contracts leads to an increased ability to finance new renewable energy facilities, which
15 lowers energy costs, REC prices, and costs to ratepayers.⁵³ The cost savings associated
16 with meeting 50 percent of incremental RPS obligations through long-term contracting
17 was estimated to be more than \$600 million over the study period.⁵⁴

⁵⁰ New Hampshire State Energy Management Office. "Energy Management." *Plant and Property Management*. Available at: <https://das.nh.gov/EnergyManagement/index.aspx>.

⁵¹ DSIRE. January 6, 2019. "Solar Renewable Energy Certificates (SRECs) Registration Program". Available at: <https://programs.dsireusa.org/system/program/detail/5687>

⁵² Sustainable Energy Advantage. 2015. *Potential Benefits of Long-Term Contracts for RPS Compliance in New Jersey*. Prepared for the Mid-Atlantic Renewable Energy Coalition.

⁵³ Sustainable Energy Advantage. p.1.

⁵⁴ Sustainable Energy Advantage. p.7.

1 Customers would realize savings on their electric bills as well. The study estimated
2 ratepayer savings of approximately 50 cents per month compared to New Jersey's current
3 procurement policies.⁵⁵ Sustainable Energy Advantage did not model a price suppression
4 affect associated with renewable additions, and because these additions tend to reduce
5 wholesale energy prices, their estimates of rate impacts are conservative.

6 In 2020, New Jersey's Clean Energy Program includes a SREC financing model that
7 provides both energy certificates and additional long-term financing for utilities to invest
8 in solar projects.⁵⁶

9 **Q. Please discuss the long-term renewables contract example from New York.**

10 A. In 2013, the Brattle Group performed a study investigating the potential effect of long-
11 term contracting on the development of renewable generating resources in New York.
12 Evidence from previous years showed that most renewable energy projects in
13 restructured U.S. power markets were built with the support of long-term contracts, and
14 that there are important reasons that long-term contracts have been the dominant
15 approach to support the development of renewable energy projects.⁵⁷ The study authors
16 conclude that financing costs for renewable projects can be lowered as a result of the
17 price certainty associated with bundled (energy, capacity, and RECs) long-term contracts
18 over 15 to 20 years, and that the impact of lower financing costs could be materially
19 beneficial to New York ratepayers. They estimate that contracts awarded between 2013

⁵⁵ Sustainable Energy Advantage. p.8.

⁵⁶ New Jersey Clean Energy Program. 2020. "SREC Registration Program". Available at:
<https://www.njcleanenergy.com/srec>.

⁵⁷ Weiss, Jurgen, and Mark Sarro. 2013. *The Importance of Long-term Contracting for Facilitating Renewable Energy Project Development*. The Brattle Group. p.1.

1 and 2015 to meet the remaining 2015 New York RPS commitment “could realistically
2 range from \$450 million to close to \$1 billion” under simple examples and reasonable
3 assumptions.⁵⁸ In addition to reducing the net retail price of electricity, the Brattle Group
4 identified a number of other benefits to consumers associated with an increase in the
5 amount of renewable generation in New York: 1) displacement of fossil-fired generation
6 and reduction in air emissions, which reduces the cost of emission reductions needed
7 from other parts of the economy; 2) creation of jobs and income associated with new
8 facilities, as well as payments for land leases and purchases of materials and services; 3)
9 a reduction in health impacts from air pollutants; and 4) a reduction in peak demand from
10 increased solar generation, displacing more expensive peaking generation units, and
11 possibly leading to a reduction in the need for new peaking capacity resources.

12 Similarly, the New York Department of Public Service (DPS), assisted by the New York
13 State Energy Research and Development Authority (NYSERDA) issued a study
14 examining the cost impact to consumers of meeting the state’s Clean Energy Standard
15 (CES), varying key input variables. One such variable was procurement structure—
16 “bundled PPAs” versus “REC only”—to develop new renewables. Study findings show
17 that bundled PPAs result in greater revenue certainty to developers, giving projects a
18 lower expected gross program cost than a “REC only” procurement approach. Total
19 benefits to consumers of the CES under a “REC only” scenario were estimated to be \$65

⁵⁸ Brattle Group, p.3.

1 million, compared to a benefit of more than \$1.5 billion under a “PPA only” procurement
2 scenario.⁵⁹

3 In January 2020, New York’s State Energy Research and Development Authority
4 (NYSERDA) authorized an order requiring 1.6 million 1-MWh Tier 1 REC procurements
5 under the state’s most recent Renewable Energy Standard solicitation, which will award
6 long-term contracts to eligible resource developers.⁶⁰

7 **Q. Please discuss the long-term renewables contract example through the U.S.**
8 **Environmental Protection Agency.**

9 A. The Green Power Partnership (GPP) is a voluntary initiative offered by the
10 Environmental Protection Agency (EPA) that supports businesses, states, government
11 agencies, nonprofits, and educational institutions in their efforts to procure a larger share
12 of energy usage from clean sources. The program highlights 429 partners that have
13 signed a long-term contract to purchase renewable electricity, with term lengths ranging
14 from five to thirty years.⁶¹ Participation in GPP is available to any entity with an annual
15 electricity use of 100 megawatt-hours (MWh) or more. Individual and private residences,
16 as well as electric service providers, are barred from participating. Since the
17 establishment of its GPP in 2001, EPA reports that the U.S. clean energy market has
18 grown by almost 5,000 percent. The program is designed to increase organizations’ clean

⁵⁹ New York State Department of Public Service. 2016. *Clean Energy Standard White Paper – Cost Study*. Slide 39.

⁶⁰ New York State Public Service Commission. January 16, 2020. *Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard*. Case No. 15-E-0302. Available at: <https://www.nyserd.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/RES-Tier-One-Eligibility/Solicitations-for-Long-term-Contracts>.

⁶¹ U.S. EPA. April 27, 2020. “Green Power Partnership Long-term Contracts”. *United States Environmental Protection Agency*. Available at: <https://www.epa.gov/greenpower/green-power-partnership-long-term-contracts>.

1 energy consumption and to advance domestic development of renewable resources.⁶²
2 EPA provides verification of energy sources and publicity to organizations that
3 voluntarily commit to source all or a portion of their electricity consumption from
4 renewable resources.⁶³ Outside of environmental benefits, other incentives to participate
5 include press coverage, credibility in partnering with EPA, and differentiation from
6 competitors. Another benefit in joining the Green Power Partnership is access to expert
7 advice in several forms: communications support, trainings on green power purchasing
8 and generation, and technical assistance.

9 The combined renewable power consumption from Green Power partners totals 24
10 million MWh annually,⁶⁴ or 0.6 percent of total U.S. electric demand in 2018.⁶⁵

11 **V. RECOMMENDATIONS**

12 **Q. Based on the findings in your testimony, what are your recommendations for the**
13 **Commission?**

14 **A.** I recommend that the Commission require Duquesne to do issue a bundled renewables
15 RFP. In the absence of such an RFP, the Commission should require Duquesne to initiate
16 a pilot program amounting to 10 percent or more of its total AECs obligation (or a
17 minimum of 21 MW solar or 12 MW wind renewables contracts).⁶⁶ For optimal results
18 for ratepayers, the Commission should direct the Company to work together with

⁶² U.S. EPA. 2018. "Green Power Partnership Program Overview". *United States Environmental Protection Agency*. Available at: <https://www.epa.gov/greenpower/green-power-partnership-program-overview>.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ U.S. Energy Information Administration. October 2019. "Total electric power industry summary statistics". *Electric Power Annual*. Available at: <https://www.eia.gov/electricity/annual/>.

⁶⁶ Calculated using solar and wind capacity factors of 32 percent and 55 percent, respectively. Lazard. November 2019. *Levelized Cost of Energy Analysis 13.0*. pp.16-17. Available at: <https://www.lazard.com/perspective/lcoe2019>

1 stakeholders to design a prudent mix that allows customers to receive the benefits of
2 long-term contracts for renewables.

3 **Q. Does this conclude your direct testimony?**

4 A. Yes. However I may wish to comment briefly on Duquesne Light's responses to
5 MAREC-Action's Set I Interrogatories which were received after the foregoing testimony
6 had been completed and submitted for service without the ability, due to virus
7 restrictions, to review the responses with other member of the MAREC-Action team.



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Liz Stanton Consulting, Arlington, MA. *Independent Consultant*, August 2016 – January 2017.

Providing consulting services on the economics of energy, environment and equity.

Synapse Energy Economics Inc., Cambridge, MA. *Principal Economist*, 2012 – 2016.

Consulted on issues of energy economics, environmental impacts, climate change policy, and environmental externalities valuation.

Stockholm Environment Institute - U.S. Center, Somerville, MA. *Senior Economist*, 2010–2012; *Economist*, 2008 – 2009.

Wrote extensively for academic, policy, and general audiences, and directed studies for a wide range of government agencies, international organizations, and nonprofit groups.

Global Development and Environment Institute, Tufts University, Medford, MA. *Researcher*, 2006 – 2007.

Political Economy Research Institute, University of Massachusetts-Amherst, Amherst, MA. *Editor and Researcher – Natural Assets Project*, 2002 – 2005.

Center for Popular Economics, University of Massachusetts-Amherst, Amherst, MA. *Program Director*, 2001 – 2003.

EDUCATION

University of Massachusetts-Amherst, Amherst, MA

Doctor of Philosophy in Economics, 2007

New Mexico State University, Las Cruces, NM

Master of Arts in Economics, 2000

School for International Training, Brattleboro, VT

Bachelor of International Studies, 1994



AFFILIATIONS

Global Development and Environment Institute, Tufts University, Medford, MA.

Senior Fellow, Visiting Scholar, 2007 – Present

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Fitchburg State College, Fitchburg, MA

Adjunct Professor, Social Sciences Department, 2006

Castleton State College and the Southeast Vermont Community Learning Collaborative, Dummerston, VT

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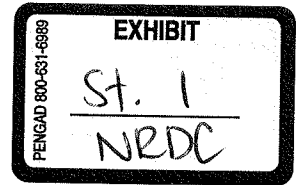
BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

**Petition of Duquesne Light Company for)
Approval Of Default Service Plan For The)
Period June 1, 2021 Through May 31, 2025)
_____)**

Docket No. P-2020-3019522

DIRECT TESTIMONY OF KATHLEEN HARRIS

NRDC Statement No. 1



JULY 17, 2020

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1 **I. INTRODUCTION & QUALIFICATIONS**

2 **Q. Please state for the record your name, position, and business address.**

3 A. My name is Kathleen Harris. I am employed by Natural Resources Defense Council
4 (“NRDC”) as a Clean Vehicles and Fuels Advocate. My business address is 40 W 20th Street,
5 New York, New York 10025.

6 **Q. Please describe your current work duties, work experience, and educational**
7 **background.**

8 A. My current position at NRDC is Eastern Clean Vehicles and Fuels Advocate. I manage the
9 organization's legislative, regulatory, and administrative efforts to expand transportation
10 electrification in the Mid-Atlantic and Eastern region of the United States. In this position, I
11 am also personally familiar with NRDC's efforts on transportation electrification around the
12 country.

13 I hold a Bachelor of Science in Environmental Science with a concentration in marine
14 science and a minor in Political Science and a Master of Marine Policy: both from the
15 University of Delaware. At the University of Delaware, I worked as a research assistant at the
16 Center for Carbon-free Power Integration and served as project manager for a study around
17 off-shore wind integration into the PJM grid. Additionally, I led a program to install electric
18 vehicle charging stations throughout the state of Delaware to ensure no electric vehicle driver
19 was more than 50 miles from a charging station anywhere in the state. For my Master's thesis,
20 “Improving the Electric Vehicle Drivers Experience,” I interviewed electric vehicle drivers to
21 understand the challenges of using public electric vehicle charging stations.

22

1 Prior to working for NRDC, I was the Clean Transportation Planner for 4 years at the
2 Delaware Department of Natural Resources and Environmental Control's Division of Climate,
3 Coastal, and Energy. During my tenure there, I managed the state's Clean Vehicle Rebate and
4 Electric Vehicle Charging Equipment Rebate Programs, which provided rebates for alternative
5 fuel vehicles, including electric vehicles, and electric vehicle charging stations. Additionally,
6 I helped the Department intervene in matters with the Delaware Public Service Commission
7 and developed and supported legislation related to transportation electrification. I also served
8 as Delaware's Clean Cities Coordinator, which brought together over 50 stakeholders from
9 around the state to promote clean transportation efforts. My work experience is summarized in
10 my resume, provided as Exhibit KAH-100.

11 **Q. Have you previously testified before this Commission or as an expert in any other**
12 **proceeding?**

13 A. No, I have not previously testified before the Public Utility Commission of Pennsylvania.

14 **Q. What is the purpose of your testimony?**

15 A. I am testifying regarding the request for approval of Duquesne Light Company's ("DLC"
16 or "Company") Default Service Plan for the Period of June 1, 2021 Through May 31, 2025.
17 The purpose of my testimony is to support Company's proposed the electric vehicle time-of-
18 use rate ("EV-TOU") with certain modifications described below.

19 **Q. Are you sponsoring any exhibits?**

20 A. Yes. I am sponsoring the following exhibits:

21 KAH-100: Resume of Kathleen Harris

22 KAH-101: Synapse Energy Economics, Inc. analysis, July 2020

23 KAH-102: DLC Resp. to Interrog. NRDC-I-7

1 KAH-103: DLC Resp. to Interrog. NRDC-II-2

2 KAH-104: DLC Resp. to Interrog. NRDC-II-1

3 **Q. Please summarize NRDC's recommendations.**

4 A. NRDC recommends the Commission approve DLC's EV-TOU program with the
5 modifications recommended in this testimony because we believe that the program will support
6 the electrification of transportation in the Company's service area, provide customers that
7 charge electric vehicles ("EVs") throughout the program with significant fuel cost savings,
8 reduce emissions of both greenhouse gases and local air pollutants, and put downward pressure
9 on the price of electricity to the benefit of all of the Company's customers. In this testimony, I
10 explain: the importance and benefits of EV-TOU rates, generally; why the Company should
11 offer EV-TOU rates as a standard part of its Default Service Plan, rather than as a pilot; and
12 the unique characteristics of C&I customers and the best practices for sustainable, long-term
13 rates.

14 Further, I provide the following recommendations to modify the Company's proposed EV-
15 TOU program:

16 1. The Company should educate customers about the tradeoffs of whole-premises TOU
17 rates vs. separated EV load metering and ensuring that DLC communicates to its
18 customers that they have a choice about separate EV metering; and

19 2. DLC should modify its approach for C&I customers by:

20 a. Considering the potential effects of EV load on small and medium C&I
21 customers with loads of under 200 kW and the potential for the EV load to
22 push customers over their 200-kW limit;

1 b. Adopting certain best practices for C&I rates, which I describe below, from
2 other jurisdictions.

3 While the whole-premises¹ EV-TOU rate encompasses both residential and C&I classes, I
4 will discuss both classes separately for the sake of this testimony.

5 **Q. Should the EV-TOU pilot program offered by the Company be approved?**

6 A. Yes, with the modifications discussed in the following sections of my testimony. The
7 Company is right to consider EV-TOU rates in their default service plan and, to the best of my
8 knowledge, is the first utility in Pennsylvania to propose an EV-TOU rate to encourage drivers
9 to shift charging to off-peak hours, which will provide benefits to all utility customers, whether
10 or not they drive an electric vehicle. NRDC also supports the Company's decision to make the
11 proposed EV-TOU pilot program available to C&I customers.

12 **Q. Why is it important that the Company shift electric vehicle charging to off-peak hours?**

13 A. Shifting EV charging to off-peak hours can lower electricity bills for all customers, reduce
14 operating costs for EV drivers, and drive down greenhouse gas (GHG) emissions. If EV charging
15 load is managed appropriately, the net present value of cumulative benefits from greater EV use
16 in Pennsylvania could exceed \$8 billion by 2050.² Of these total net benefits:

- 17 • \$1.3 billion will accrue to electric utility customers in the form of reduced electric bills;
- 18 • \$4.6 billion will accrue directly to Pennsylvania drivers in the form of reduced annual
- 19 vehicle operating costs; and

¹ i.e., a whole-premises approach means "the EV-TOU rates would apply to all load associated with the applicable meter, not just the EV load." Direct Testimony of David B. Ogden, 17:1-2.

² MJ Bradley and Associates, *Plug-in Electric Vehicle Cost-Benefit Analysis: Pennsylvania*. December 2016.

- 1 • \$2.2 billion will accrue to society at large, as the monetized value of reduced GHG
2 emissions.³

3 Transportation electrification programs that use price signals to encourage drivers to shift
4 charging to off-peak hours will make it more likely that Pennsylvania will realize these benefits
5 and accelerate their realization.

6 **Q. Please explain the potential cost savings for EV drivers related to fuel consumption in**
7 **more detail.**

8 A. In the DLC service territory, EV drivers will see benefits from fuel cost savings related to
9 transportation electrification, especially when charging occurs during off-peak hours. For
10 residential customers, charging an EV at home is equivalent to refueling a gasoline vehicle for
11 \$1.25 per gallon.⁴

12 For C&I customers with that charge their EVs between 9pm-5am (a mix of shoulder and
13 off-peak times), the proposed EV-TOU rate reduces supply costs by \$0.0225/kWh, and the
14 cost of driving 100 miles is reduced by \$0.64. This is equivalent to a reduction in the price of
15 gasoline of \$0.27/gallon for a gasoline vehicle.⁵

16 To reiterate this point, for 2021, the EIA Annual Energy Outlook projects gasoline costs
17 of \$2.64/gallon. The savings associated with the EV-TOU rate would be about 10% of the fuel
18 cost per mile for a gasoline vehicle. Fleets can realize slightly higher savings when EV fleets
19 charge entirely during off-peak hours. Under this scenario, supply costs would be reduced by

³ *Id.* at iv.

⁴ United States Department of Energy, *eGallon*, updated (July 11, 2020), < available at:
<https://www.energy.gov/maps/egallon>>

⁵ Ex. KAH-101 Synapse Energy Economics, Inc. analysis, July 2020

1 \$0.025/kWh, which equates to a reduction in the price of gasoline of \$0.30/ gallon—about
2 11% of the fuel cost per mile for a gasoline vehicle.

3 **Q. How can EV charging help lower the costs of managing the electric grid?**

4 A. As EVs charge when they are parked, most of the light-duty vehicle charging occurs at
5 home and can be charged when the grid is underutilized. Price signals that direct drivers to
6 charge during off-peak hours, and not when they arrive at their destination, can help to move
7 charging when there is spare capacity on the grid. The billions of dollars in new utility revenue
8 from EV charging in excess of associated costs can put downward pressure on electric rates to
9 the benefit of all customers. As the MJ Bradley analysis demonstrates, the revenue in excess
10 of costs could reduce all utility bills in the state by \$1.3 billion by 2050. Further, EVs can also
11 serve as distributed energy resources and act as additional storage for the grid through
12 technologies such as vehicle-grid-integration.⁶

13 **Q. Are there real-world examples where these kinds of benefits have been achieved?**

14 A. Yes. Real-world data shows that these benefits are not just hypothetical—the positive effect
15 of EV integration onto the grid has already been observed and documented by Synapse Energy
16 Economics, Inc. (“Synapse”) in a study entitled “Electric Vehicles are Driving Electric Rates
17 Down.”⁷ That study examined the two utility service territories with the highest number of EVs
18 of any in the U.S.: Pacific Gas & Electric (“PG&E”) and Southern California Edison (“SCE”).
19 It found, based on real-world data, that EVs are pushing electric rates down, largely because
20 PG&E’s and SCE’s time-of-use rates and other distributed resource programs have
21 successfully encouraged people to charge overnight when there is plenty of spare capacity on

⁶ Pamela MacDougall, *The Missing Piece to Energy Storage Is in Your Driveway*, NRDC, (August 2018)

⁷ Frost et al, *Electric Vehicles Are Driving Electric Rates Down* (June 2020 Update), available at <
https://www.synapse-energy.com/sites/default/files/EV_Impacts_June_2020_18-122.pdf>

1 the grid. Synapse evaluated the revenues and costs associated with EVs from 2012 through
2 2019 in PG&E and SCE service territories. They compared the new revenue the utilities
3 collected from EV drivers to the cost of the energy required to charge those vehicles, plus the
4 costs of any associated upgrades to the distribution and transmission grid, as well as the costs
5 of utility EV programs that are deploying charging stations for all types of EVs. In total, EV
6 drivers contributed an estimated \$806 million more than the associated costs over the study
7 period.

8 Thanks to an accounting mechanism known as “revenue decoupling” that money is
9 automatically returned to utility customers in the form of lower rates and bills. In states that
10 have yet to adopt revenue decoupling, there may be a lag between utility rate cases, but EV
11 charging should still put downward pressure on rates to the benefit of all customers.

12 The Company’s proposed EV-TOU pilot program—especially with some
13 modifications—would help accelerate transportation electrification and ensure customers
14 realize the benefits described above sooner rather than later.

15 **Q. Should this program be a pilot?**

16 A. No, this program should be a standard part of the Company’s Default Service Plan. The
17 benefits of EV-TOU programs, such as those that the Company has proposed, are well-established
18 and present little to no risk to customers who choose not to participate in the program, Therefore,
19 it is unnecessary to pilot proven technology and programs. I strongly recommend that the
20 Commission approve this offering as a full program and not a pilot.

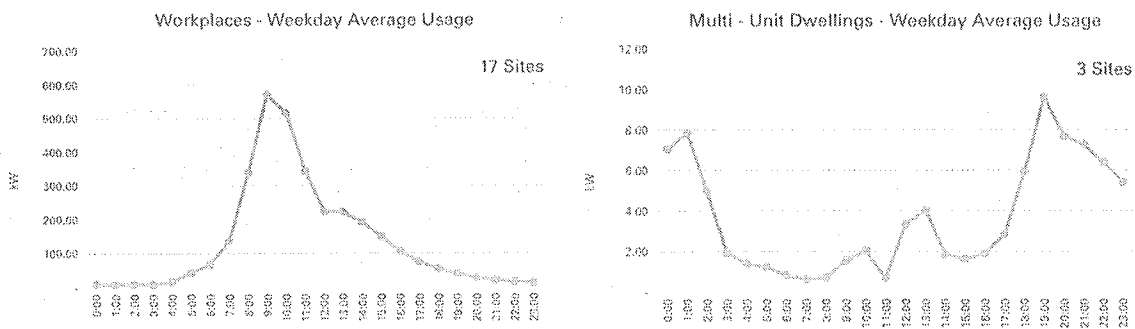
21 **II. RESIDENTIAL EV-TOU**

22 **Q. Should the Commission approve the Residential component of the EV-TOU rate?**

1 A. Yes. However, in order to realize the same benefits that PG&E and SCE utility customers
2 have experienced, it is not enough for the Company merely to establish a TOU rate—the
3 existence of the rate must also be communicated to EV drivers, and they must actually see price
4 signals intended to encourage them to shift charging to off-peak hours. Drivers that do not see
5 time-variant price signals generally charge as soon as they arrive at their destination regardless of
6 grid conditions or underlying utility rates.

7 This is best evidenced by Southern California Edison’s Charge Ready pilot, in which
8 drivers at multi-unit dwellings (“MUDs”) and workplaces who did not see price signals had no
9 incentive to change their behavior and simply plugged-in their vehicles when they reached their
10 destination In that pilot, site hosts were required to take service on TOU rates, but there was no
11 requirement that those price signals were passed through to EV drivers. The charging profiles in
12 the Charge Ready pilot program report show that the lack of time-variant price signals seen by
13 EV drivers resulted in those drivers charging immediately upon arrival at their destination with
14 no correlation to grid conditions or time-of-use periods.⁸

15 **Figure 1: Load Profiles from Charge Ready Pilot**



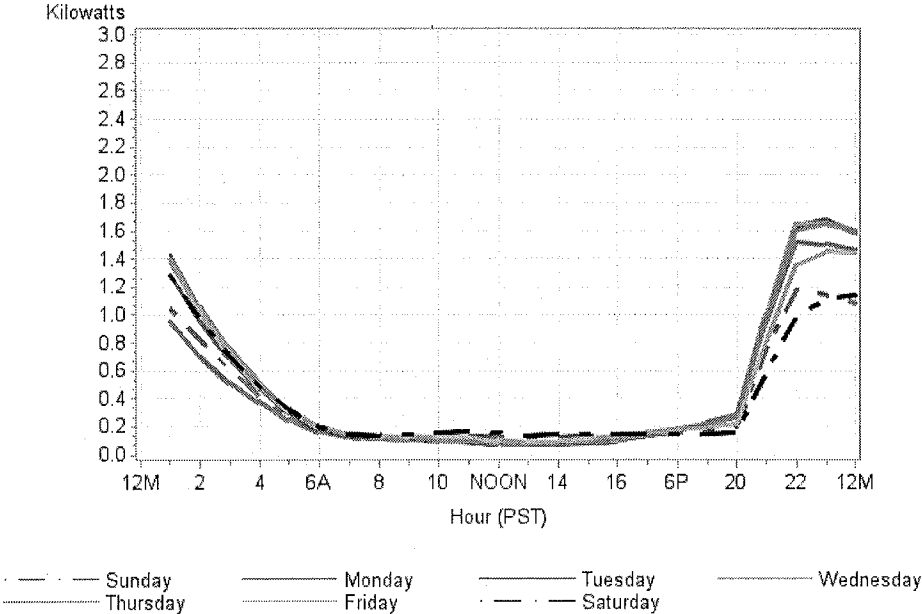
16
17

⁸ SCE Charge Ready Pilot Program Report at 21-22 (indicating that charging in many segments was occurring primarily during late afternoon and evening hours).

1 At workplaces, drivers charged as soon as they arrived at work, with demand peaking at 9
2 a.m., with the bulk of charging complete before the afternoon, which means those vehicles were
3 not available to absorb solar generation that peaks during afternoon hours. At MUDs, drivers
4 charged as soon as they arrived at home in the evening, with demand peaking at 7 p.m.
5 (exacerbating system-wide peak demand), the bulk of charging complete before 1 a.m., and very
6 little charging occurring in the early morning hours when the system is significantly
7 underutilized. This is unfortunate, but entirely predictable; if given no reason to do otherwise,
8 drivers will charge whenever they arrive at their destination. It is also entirely avoidable;
9 residential customers taking service on SCE’s “TOU-EV-1” rate almost certainly arrive home at
10 the same hour as do the drivers participating in the Charge Ready Pilot, but as SCE noted, they
11 do not charge upon arrival—instead, they “commence charging promptly at the beginning of the
12 off-peak interval at 10:00 p.m.,” as illustrated in Figure 2.

1

Figure 2: Average Hourly Load Profile for Each Day of the Week on SCE's "TOU-EV-1" Rate⁹



2

3 A simple nudge in the form of a TOU price signal seen by EV drivers is sufficient to push
 4 EV charging to hours of the day when it benefits the grid and when fuel cost savings can be
 5 maximized. Recognizing this problem, SCE modified its successor program, Charge Ready 2, to
 6 make the default arrangement that participating sites hosts pass price signals onto drivers. DLC
 7 should similarly modify the EV-TOU to incorporate this default arrangement and ensure that EV
 8 drivers generally see price signals that encourage them to charge in a manner that both supports
 9 the electric grid and maximizes fuel cost savings.

10 **Q. Are the proposed price ratios sufficient to shift charging to off-peak hours?**

11 A. DLC should ensure that the ratio of peak to off-peak price ratio is sufficient to motivate
 12 customers to shift their load and charging times to off-peak hours. The proposed EV-TOU has a
 13 peak-to-off-peak ratio of about 3.5:1 based on a combination of historical PJM LMPs and 2021-

⁹ 6th Joint IOU Electric Vehicle Load Research Report, December 2017 at 61.

1 2022 cleared capacity prices. Additionally, the peak, shoulder, and off-peak periods do not
2 depend on the day of the week or on the season, with an emphasis on simplicity over
3 maximization of the peak-to-off peak ratio. For a more effective price signal, DLC could also
4 design a rate that has more variation—which will be less simple—but has a higher peak to off-
5 peak ratio.

6 DLC should also look to best practices from other jurisdictions when considering the
7 appropriate and must successful price ratios, as well as the optimal time periods for off-peak,
8 shoulder, and peak rates. The larger the peak to off-peak price ratio, the larger the price signal to
9 encourage drivers to charge during off-peak hours. For example, San Diego Gas and Electric
10 (SDG&E) found that a peak to off-peak ratio of 6:1 shifted an additional 10 percent of all
11 charging (around 90 percent total) to off-peak hours compared to a ratio of 2:1.¹⁰

12 **Q. Are these price signals effective for workplace and multi-unit dwellings as well?**

13 A. Yes. Data from SCE and PG&E programs show that drivers at workplaces and multi-unit
14 dwellings (“MUD”) are also able to shift their charging time to off peak hours through well
15 designed price signals. SDG&E’s “Power Your Drive” workplace and MUD charging station
16 deployment program showed that when price signals were passed through to EV drivers, 90% of
17 the kWh delivered the program occurred during off-peak and super-off-peak hours.

18

19 **Q. Should the Company develop EV-Only TOU rates in addition to Whole-premises EV-
20 TOU rates?**

21 A. Under the proposed program, “customers have the option of setting up a separate service
22 and second meter exclusively for EV charging if that is their preference, but the Company did

¹⁰ Nexant. 2014. “Final Evaluation of SDG&E Plug-in Electric Vehicle TOU Pricing and Technology Study.”

1 not want to make such separate service a requirement for customers to access the EV TOU
2 rate”.¹¹ While the whole-premises EV-TOU rate may be sufficient to shift EV charging to off-
3 peak hours, the Company should educate customers regarding the tradeoffs and benefits of EV-
4 Only TOU rates versus a whole-premises rate.

5 According to the Company, rates would be recalculated for the entire customer class—
6 whether it’s Residential/Lighting, small C&I, or medium C&I.¹² This means that all members of
7 a customer class would benefit from the load shifting of the customers on the EV-TOU rate,
8 instead of just the TOU customers. The rate benefits of load shifting should be provided
9 exclusively to those customers who are on the TOU rate and shifting their load to help to further
10 incentivize adoption of EVs and shifting of load to off-peak hours.

11 As the Company states in the filing, whole-premises EV-TOU program is cheaper for the
12 customer than an EV-Only TOU rate program. This is because an EV-Only TOU rate requires
13 the customer install either a second meter or a submeter.¹³ A second meter may be installed
14 specifically to monitor EV charging, and according to the Minnesota Public Utilities
15 Commission, customers spend between about \$1,700-\$3,500 on electrical wiring and metering
16 costs to enroll in Xcel Energy’s EV tariff.¹⁴ Submetering is similar to a second meter, but the
17 submeter is located between the primary meter and the EV, and allows for only EV load to be on
18 a TOU rate.¹⁵ Utilities in California have piloted both stand-alone and charging station-integrated
19 submeter technology, which is cheaper than a second meter. This includes:

¹¹ Ex. KAH-102 (Company response to NRDC Interrogatory I-7).

¹² Ex KAH-103 (Company response to NRDC Interrogatory II- 2).

¹³ Whited et al, *Driving Transportation Electrification Forward in New York*, June 2018), pg. 17-21, available at <
www.synapse-energy.com/sites/default/files/NY-EV-Rate-%20Report-18-021.pdf>

¹⁴ Minnesota Public Utilities Commission, Order Approving Pilot Program, Granting Variance, and Requiring
Annual Reports. Docket No. E-002/M-17-817, May 9, 2018) page 2

¹⁵ *Id.*

- 1 1) Stand-alone submeters like the WattBox™ from eMotorWerks, with a cost of
2 approximately \$250;
- 3 2) Submeters integrated with the EV supply equipment (“EVSE,” colloquially “charging
4 station”). At-home EVSE are generally Level 2 charging stations such as the
5 JuiceBox™ from eMotorWerks with a cost of approximately \$899, or the ChargePoint
6 Home from ChargePoint with a cost of approximately \$674; and
- 7 3) Mobile (in-car) submeters such as the FleetCarma C2 device.¹⁶

8 While there may be an additional cost to EV-Only TOU rates, they allow customers who
9 are unable to shift all of their load to off-peak hours to at least be able to shift their charging load
10 with minimal risk. I expand upon this in the C&I customer component of this testimony.

11 EV-only TOU rates were recommended in “Driving Transportation Electrification
12 Forward in Pennsylvania,” a report by Synapse that NRDC commissioned in 2018.¹⁷ While EV-
13 only TOU rates require a second meter, advanced metering technology (“AMI”), or a smart-
14 charger, EV-only TOUs limits the risk of having a larger bill due to TOU rates not aligning with
15 their non-EV base load, and therefore can provide significant benefits to customers. EV drivers
16 with separate meters and EV-only TOU rates only consume 5 to 10 percent of their energy
17 during on-peak time periods, compared to customers on whole-house TOU rates, who use about
18 15-20 percent of their energy during on-peak times.¹⁸

19 **Q. Are there utilities outside of California that have implemented EV-Only TOU rates?**

¹⁶ *Id.* at 19.

¹⁷ Whited et al, *Driving Transportation Forward in Pennsylvania*, (September 2018) available at < www.synapse-energy.com/sites/default/files/PA-EV-Rates-Report-18-021.pdf >

¹⁸ Allison, A. and Whited, M., *Electric Vehicles are not Crashing the Grid*, (November 2017) available at < www.synapse-energy.com/sites/default/files/EVs-Not-Crashing-Grid-17-025_0.pdf >

1 A. Yes. In January 2019, the Maryland Public Service Commission approved a series of
2 electric utility programs—called the Statewide EV Portfolio—that includes a *requirement* for
3 utilities to develop EV-Only TOU rates.¹⁹ EV-TOU rates will allow drivers to shift just their
4 charging to off-peak hours, especially if it is not feasible for them to shift all of their energy use
5 to off-peak times. An EV charging in Illinois in ComEd’s service territory would save an
6 additional \$685 by charging overnight over a 5-year period if EV-Only rates were
7 implemented.²⁰

8 **III.COMMERICAL AND INDUSTRIAL CUSTOMERS**

9 **Q. Why is it important that C&I customers are included in the EV-TOU program?**

10 A. The nation’s electric commercial vehicle fleet is expected to grow from approximately
11 240,000 in 2020, to 9.5 million by 2030, and 40 million by 2040.²¹ Therefore, the Company’s
12 proposal and likely program implementation is responsive and timely, as establishing best
13 practices with respect to fleet electrification and grid integration of fleet charging is critical to
14 leverage EV charging for grid benefit and to maximize the benefits to all of the Company’s
15 ratepayers. Pennsylvania also signed on to the bi-partisan multi-state memorandum of
16 understanding, in which the Commonwealth will work with states throughout the country to
17 determine pathways for the electrification of trucks and buses, stimulating the market for these
18 vehicles in Pennsylvania.²²

¹⁹ Order No. 88997 Case No. 9478. (ML 223588)

²⁰ Citizens Utility Board, *Charging Ahead: Driving Value From Electric Vehicles For All Electricity Customers* available at <www.citizensutilityboard.org/wp-content/uploads/2019/03/Charging-Ahead-Deriving-Value-from-Electric-Vehicles-for-All-Electricity-Customers-v6-031419.pdf>

²¹ Bloomberg New Energy Finance, *Electric Vehicle Outlook 2020* <<https://about.bnef.com/electric-vehicle-outlook/>>.

²² Patricio Portillo, *15 States Take Historic Action on Transportation Pollution*, NRDC (July, 2020)

1 Including C&I customers into EV-rate design reflects emerging best practices from other
2 states that electrified fleets are an increasingly important component of utility plans.²³
3 Additionally, medium- and heavy-duty vehicles are ripe for electrification. The technology is
4 market-ready for most fleet applications and over the coming years, vehicle manufacturers will
5 continue to increase the number of electrified models available for medium-and-heavy duty
6 fleet uses. Moreover, electrification of such vehicles will reduce transportation-related air
7 pollution, including toxic pollutants, nitrogen oxide (NOx), and greenhouse gases. Diesel
8 emissions from medium- and heavy-duty vehicles are toxic and dangerous to those breathing
9 closest to the source of pollution; exposure to significant amounts of diesel exhaust can lead to
10 premature death and other devastating health impacts including asthma and respiratory
11 impacts,²⁴ pregnancy complications and adverse reproductive outcomes,²⁵ cardiac and vascular
12 impairments,²⁶ and heightened cancer risk.²⁷ Additionally, the combustion of fossil fuels by
13 medium-and heavy-duty vehicles emit large quantities of NOx pollution, which contributes to

²³ See, e.g., Office of the Governor, *Washington State Electric Fleets Initiative* (December 2015), available at <http://www.governor.wa.gov/sites/default/files/documents/ElectricFleetsInitiative12_07_2015.pdf>.

²⁴ S.J. Brandt et al, *Costs of Childhood Asthma Due to Traffic-Related Pollution in Two California Communities*, 40 *Euro. Respiratory J.* 363–70 (2012), available at <<http://doi.org/10.1183/09031936.00157811>>.

²⁵ Jun Wu et al, *Association Between Local Traffic-Generated Air Pollution and Preeclampsia and Preterm Delivery in the South Coast Air Basin*, 117 *Envtl. Health Persp.* 1773, 1773-1779 (Nov. 2009), available at <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2801174/>>; Ex MEC-103 (R. Basu et al, *Effects of Fine Particulate Matter and Its Constituents on Low Birth Weight Among Full-Term Infants in California*, 128 *Envtl. Research* 42–51 (2014)).

²⁶ J.E. Hart et al, *Ischaemic Heart Disease Mortality and Years of Work in Trucking Industry Workers*, 70 *Occupational and Envtl. Medicine* 523–528 (2013)).

²⁷ *Air Res. Bd., Supplement to the June 2010 Staff Report on Proposed Actions to Further Reduce Diesel Particulate Matter at High-Priority California Railyards* (July 2010), available at <<http://www.arb.ca.gov/railyard/commitments/supcomceqa070511.pdf>>; Ex MEC-105 (*IARC: Diesel Engine Exhaust Carcinogenic*, 20 *Cent. Eur. J. Public Health* 120, 138 (June 2012)); L. Benbrahim-Tallaa et al, *Carcinogenicity of Diesel-Engine and Gasoline-Engine Exhausts and Some Nitroarenes*, 13 *The Lancet Oncology* 663–664 (2012), available at <[http://doi.org/10.1016/S1470-2045\(12\)70280-2](http://doi.org/10.1016/S1470-2045(12)70280-2)>.

1 the formation of both particulate matter pollution and ozone (i.e., smog).²⁸ Finally, medium
2 and heavy-duty vehicles generate GHG emissions that contribute to global climate change,
3 which exacerbates local air quality issues through various means; climate-driven increases in
4 ozone are predicted to cause premature deaths, hospital visits, lost school days, and acute
5 respiratory symptoms, and wildfires made more frequent and more severe by climate change
6 further increase emissions of particulate matter and ozone precursors and resulting in
7 additional adverse local health outcomes.²⁹ This “triple threat” disproportionately impacts low-
8 income communities and communities of color that often live near freeways, ports, railyards,
9 warehouses and other facilities that generate significant levels of localized diesel exhaust.³⁰

10 Therefore, the Company’s decision to begin to consider ways to support the electrification
11 of some fleets, and reduce costs for these fleet owners, is an important first step.

12 **Q. Do you have any concerns over a whole-premises TOU rate for C&I customers?**

13 A. No, but the Company should educate customers about the tradeoffs of whole-premises
14 TOU rates vs. separated EV load metering and ensuring that DLC communicates to its customers
15 that they have a choice about separate EV metering. Two examples of customer education options
16 include shadow bills and online bill comparison calculators. The good news is that, on average, a
17 typical small-medium C&I customer who elects for the whole premises EV-TOU rate will not see
18 a notable difference on their bill compared to the flat rate, even if they do not shift their non-EV
19 load (Figure 4).

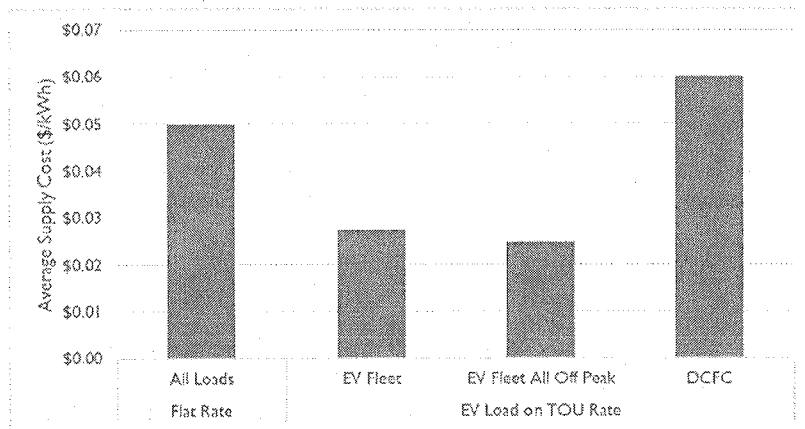
²⁸ *Nitrogen Dioxide*, U.S. Evtl. Protection Agency, <https://www.epa.gov/no2-pollution>.

²⁹ U.S. Global Change Research Program, *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment*, chapter 3, “Air Quality Impacts” (2016), available at <<https://health2016.globalchange.gov/air-quality-impacts>>.

³⁰ Arlene Rosenbaum et al, *Analysis of Diesel Particulate Matter Health Risk Disparities in Selected US Harbor Areas*, *Am. J. Pub. Health* S217, S221 (2011), available at <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222501/>>.

1 C&I EV fleet load on the EV-TOU rate will be cheaper than on the flat rate because
2 fleets typically charge overnight, providing the greatest opportunity for savings on their electric
3 bills (Figure 3). Additionally, EV load can respond to price signals more effectively than other
4 C&I loads. EV-TOU rates at C&I fleet facilities may reduce EV load bills by nearly 50%. Other
5 loads can benefit from TOU rates, but in cases where existing loads are unable to be shifted to
6 off-peak hours, customers may perceive a whole-premises TOU-rate as risky. When considering
7 whether to opt for an EV-TOU rate, there may be more perceived risk for C&I customers whose
8 load is primarily non-EV and not flexible—serving as a potential barrier to EV-TOU rate
9 acceptance and EV adoption.

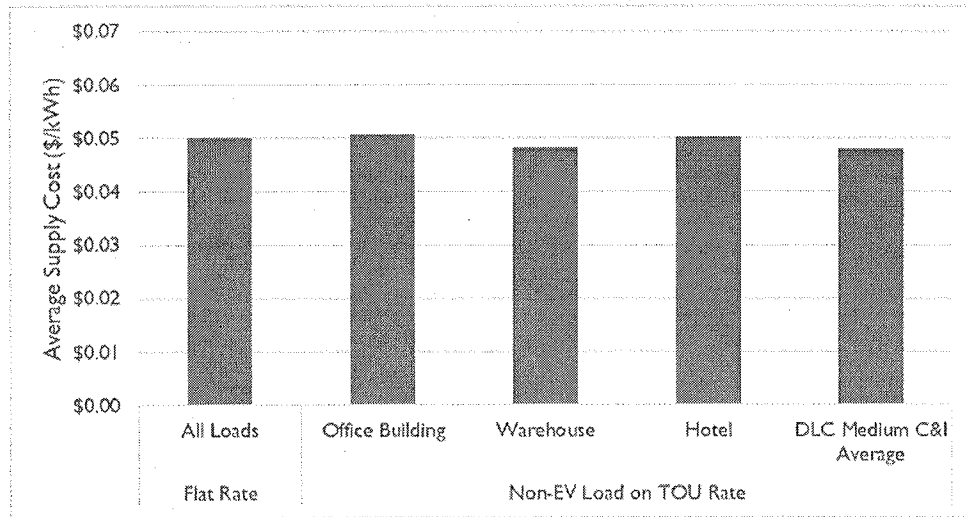
11 *Figure 3: EV Load on a TOU rate compared to the Flat Rate*



12
13
14 Based on an analysis by Synapse, the proposed EV-TOU rate will not drastically affect the
15 overall supply costs of non-EV load for C&I customers (Figure 4). However, this means that the
16 C&I customers may see limited benefit and unnecessary risk by participating electing the whole-
17 premises EV-TOU rate.

1

Figure 4: Electricity Supply Costs for C&I Customers



2

3

4

I recommend giving the customer the choice under the model that “optionality is best.”

5

While the installation of a second meter may be cost prohibitive, submetering is an option that

6

would be better for both the utility and customer, as the costs are lower than installing a second

7

meter.³¹

8

Q. What are your thoughts on the 200 kW cap for the EV-TOU rate?

9

A. The intention of the 200 kW cap appears to separate out small and medium from larger

10

C&I customers. I understand that customers with peak demands over 200 kW already have a

11

time-varying rate option. However, without separating the EV and non-EV load, there is a risk

12

that the additional EV load could tip a small or medium C&I customer over the 200 kW limit,

13

creating additional risk for the customer. This should not happen if customers are primarily

14

charging off-peak, but there may be some cases (such as Direct Current Fast Charging Stations,

15

described in more detail below) where the EV-TOU rate could potentially increase the

³¹ *Id.*

1 customer's peak load. This type of information should also be conveyed in customer education
2 materials as part of the roll-out of the EV-TOU rate. In other words, customers who are likely to
3 go over the demand limit should be informed of their options and how to select the one that
4 provides them the most savings. If they are at risk of going over the 200kW limit, their options
5 would be either (1) install submetering to stay on the EV-TOU rate for their EV charging or (2)
6 consider the real-time pricing rate for large C&I (>200kW) customers.

7 **Q. Do you have any concerns regarding the Fixed-price full requirements ("FPFR")**
8 **contract?**

9 A. The Company says that "[t]o the extent that customers elect the EV-TOU Pilot Program
10 and shift their usage to lower-priced periods or reduce their usage during higher-priced periods,
11 the underlying market-based cost to supply the customers could be reduced, resulting in lower
12 FPFR supplier bid prices over time. Accordingly, bidders in the DSP IX FPFR product
13 solicitations could submit lower bids based on their expectations about customer enrollment and
14 the associated load shifting and/or reductions."³²

15 In looking at how often the rates are revisited, it appears that Residential and Small C&I
16 rates are recalculated twice per year, while Medium C&I rates are recalculated quarterly. In
17 principle, this seems often enough for load shifting to flow through to downward pressure on
18 customer rates in a timely manner. However, if DLC begins with a pilot TOU program, not many
19 customers will be able participate at first. Downward pressure on rates likely won't be noticeable
20 to suppliers until the program is broader with more customers.

³² Ex KAH-104 (Company response to NRDC Interrogatory II-1).

1 **Q. How will the C&I rate affect Direct Current Fast Charging stations?**

2 A. Direct Current Fast Charging (“DCFC”) stations are different than other C&I customers
3 whose EV load is associated with vehicle fleets. This is because DCFC load profiles are not as
4 predictable in the nascent state of the EV market. Therefore, as DCFC stations are often placed
5 on the same rate class as buildings and commercial entities, the rates they are assigned to do not
6 reflect unique transportation loads, and issues. This traditional rate requires DCFC station
7 owners to pay demand charges, which during the nascent EV market—when public stations may
8 not be heavily utilized—can be prohibitively expensive to the station owner.

9 Under an EV-TOU rate, DCFC could face higher prices, since they are primarily used
10 during off-peak hours, and there tends to be less flexibility from drivers to shift their DCFC
11 charging needs to off-peak hours (Figure 3).

12 EV-TOU rates may still be appropriate for DCFC relative to other rate options such as
13 those that include demand charges. However, the Commission should also look to
14 recommendations recently released by Synapse in their “Best Practices for Commercial and
15 Industrial EV Rates” report.³³ In its report, Synapse notes that “[t]raditional C&I rates were
16 generally designed for large buildings, rather than for public fast charging of passenger vehicles
17 or for depot charging of truck and bus fleets” and those rates “do not reflect the unique costs or
18 flexibility of EV charging and can charge commercial EV customers much more than their true
19 cost of service.” Time-limited discounts are not a sustainable solution, and utilities and
20 regulators should develop new C&I rates designed with EV use cases in mind that are both cost-

³³ Synapse Energy Economics, Inc., *Best Practices for Commercial and Industrial EV Rates*, Updated July 13, 2020.

1 reflective and take advantage of the unique characteristics and flexibilities of EV load. Synapse
2 offers the following principles for C&I rates:

- 3 • Design rates to promote efficient use of fixed system resources, reducing costs for all
4 utility customers;
- 5 • Rates should be easy to understand and predictable;
- 6 • Rates should be designed with end users in mind;
- 7 • Time-varying volumetric rates are generally preferable to demand charges;
- 8 • Non-coincident peak demand charges should generally be avoided;
- 9 • It may be appropriate to set rates to recover marginal costs rather than embedded
10 costs; and
- 11 • Programs that rely on price signals inherent in rate design to deliver grid and user
12 benefits should ensure users actually see those price signals.³⁴

13 The Synapse report recommends time-of-use energy charges or critical peak pricing over
14 coincident demand charges for recovering the costs of shared infrastructure, since energy charges
15 better capture the duration of time that a customer is using that infrastructure. The report cautions
16 that, while limited non-coincident demand charges may be appropriate for recovering
17 distribution infrastructure costs sized to meet the maximum demand of a single customer, “non-
18 coincident demand charges are often set too high and recover costs that are not truly driven by
19 individual customer peaks.”

20 While C&I customers with DCFCs are not explicitly mentioned in the Company’s proposal,
21 they may be affected differently than customers who have vehicle fleets, were they to participate

³⁴ *Id.*

1 in this C&I EV-TOU rate. I urge the Commission to consider Synapse's recommendations in
2 moving forward with new C&I rate design for DCFC stations, including the prioritization of
3 time-varying volumetric rates over demand charges and to avoid non-coincident peak demand
4 charges altogether.

5 **IV. SUMMARY AND CLOSING REMARKS**

6 **Q. Please summarize your recommended modifications.**

7 A. The Company's proposed EV-TOU rates are a great initial step to ensuring that both
8 residential and C&I customers are incentivized to charge EVs during off-peak hours. Shifting
9 charging to hours when the grid is underutilized will provide benefits to all DLC customers,
10 and based on analysis and review of the filing and responses to discovery questions, I believe
11 the Commission should approve the EV-TOU rate with the following modifications:

- 12 1. The Company should educate customers about the tradeoffs of whole-premises TOU
13 rates vs. separated EV load metering and ensuring that DLC communicates to its
14 customers that they have a choice about separate EV metering; and
- 15 2. DLC should modify its approach for C&I customers by:
 - 16 a. Considering the potential effects of EV load on small and medium C&I
17 customers with loads of under 200 kW and the potential for the EV load to
18 push customers over their 200-kW limit;
 - 19 b. Adopting certain best practices for C&I rates, which I describe below, from
20 other jurisdictions.

21 Further, the Company should offer EV-TOU rates as a standard part of its Default Service Plan,
22 rather than as a pilot.

1 **Q. Does this complete your testimony?**

2 A. Yes.

Ex. KAH-100: Resume of Kathleen Harris

Kathleen Harris

www.linkedin.com/in/kathleen-harris

EDUCATION

Master of Marine Policy
University of Delaware, 2017
Newark Delaware

Bachelor of Science,
Environmental Science
University of Delaware, 2013
Newark, Delaware

SKILLS

- Stakeholder Engagement
- Spanish intermediate/conversant
- Microsoft Office Suite
- ArcGIS
- QGIS
- Python
- R
- Project Management
- Communication
- Problem Solving
- Data Analysis

TRAININGS

- Moving Into Supervision; 2019, State of Delaware
- Planning Effective Projects for Coastal Communities; 2017, NOAA
- Planning and Facilitating Collaborative Meetings; 2017, NOAA

AWARDS

Delaware Department of Natural Resources and Environmental Control:

- Distinguished Employee Award-Innovator (2017)
- Distinguished Employee Award-Motivator (2016)
- Distinguished Employee Award-Outstanding Team (2016, 2017)

University of Delaware:

- Elevator Pitch competition "Pitch 90", 2nd place (2014)

PROFESSIONAL EXPERIENCE

Natural Resources Defense Council

Eastern Clean Vehicles and Fuels Advocate 2019-present

State of Delaware, Department of Natural Resources and Environmental Control, Division of Climate, Coastal, and Energy

Clean Transportation Planner 2015-2019

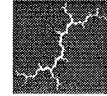
- Managed \$2.7 million Delaware Clean Transportation Incentive Program for electric, propane, and natural gas vehicle rebates; commercial, residential, and workplace electric vehicle charger rebates; and large-scale infrastructure grants— processing over 1,100 rebate applications
- Researched, analyzed, and developed policies and programs to expand clean transportation and in disadvantaged communities
- Provided written testimony in regulatory hearings related to clean transportation
- Lead the Delaware Clean Cities Coalition, serve as Coordinator, and act as key liaison between the state and the US Department of Energy; responsible for annual and quarterly reporting on fuel usage and vehicle deployment; represent the state at national meetings; manage the budget and contracting process for the state's participation in the Clean Cities Program
- Engaged stakeholders and community groups at workshops and public hearings
- Served as the primary point of contact for national and state reporting on the status and deployment of alternative fuel vehicles in the state of Delaware
- Worked with the Public Service Commission, large-scale public utilities, and private businesses to develop legislation to promote widespread electric vehicle deployment
- Represented Delaware on regional and national working groups and Coalitions— including the NESCAUM Charging Station Infrastructure Steering Committee, the US Climate Alliance's Transportation Working Group, and the Transportation and Climate Initiative
- Collaborated across departments to create, develop, and implement comprehensive environmental and transportation policies for the state— including work on the Volkswagen Settlement and Regional Greenhouse Gas Initiative
- Briefed Senators, Legislators, and Department Secretary on Delaware's clean transportation efforts and programs
- Coordinated, organized, and conducted research for the Delaware Offshore Wind Working Group

University of Delaware, School of Marine Science and Policy

Research Assistant 2013-2015

- Served as liaison to the US Department of Energy, researching and compiling data and reports for the project
- Presented program results at conferences and meetings
- Consulted with site owners and municipalities to facilitate installation of electric vehicle charging stations across the state of Delaware

KAH-101: Synapse Energy Economics, Inc. analysis, July 2020



Synapse
Energy Economics, Inc.

Duquesne EV-TOU Rate Analysis for C&I Class

Results

July 15, 2020

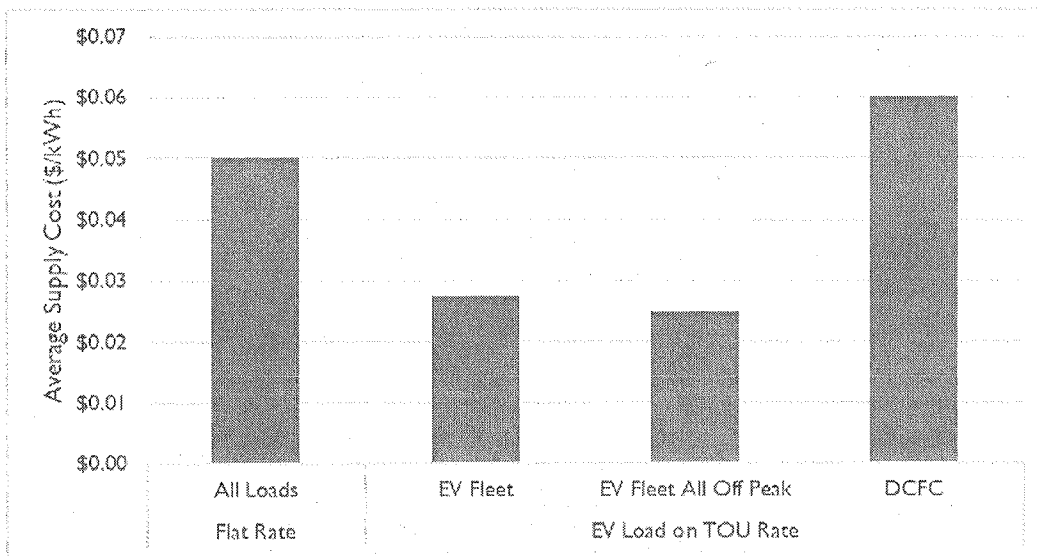
Erin Camp and Jason Frost

Synapse Model Overview

- This model estimates bill impacts for a typical small to medium C&I customer, aiming to understand how charging non-EV load on the EV-TOU rate impacts C&I customers
 - We compare electric bills for a C&I customer on DLC's EV-TOU rate for the entire premise's use of electricity to a C&I customer on DLC's EV-TOU rate for EV load only
- Additionally, we compare the impact of the TOU rate on EV charging cost per mile relative to the cost of gasoline per mile for a comparable internal combustion engine vehicle (ICE)
- Assumptions
 - EV fleets are charged between 9pm and 5am to avoid peak pricing
 - The flat supply rate is \$0.05/kWh, based on DLC's illustrative assumptions
 - Annual C&I load profiles for an office building, a warehouse, and a hotel were modeled to represent load from non-EV end uses, in addition to data from DLC

Preliminary Results

- C&I EV fleet load on the EV-TOU rate is cheaper than on the flat rate
 - Overnight charging provides the greatest opportunity for savings
- DCFC could face higher prices, as it is primarily used on peak
 - TOU may still be appropriate for DCFC relative to other options such as demand charges

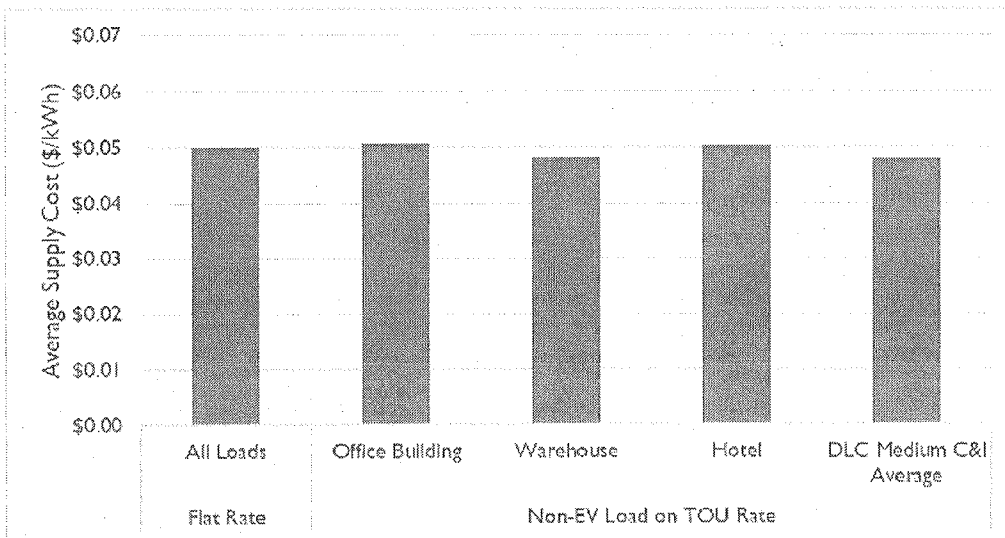


Average Supply Cost (\$/kWh)

Flat Rate	All Loads	\$0.050
	EV Fleet	\$0.028
TOU Rate	EV Fleet All Off Peak	\$0.025
	DC Fast Charging	\$0.060

Preliminary Results, cont.

- Office buildings, warehouses, and hotels face similar average TOU supply costs
 - Average rates are close to the flat rate
- C&I customers may see limited benefit and unnecessary risk in the TOU rate
- Note that DLC Medium C&I Average represents DLC data from March 2020



Flat Rate	All Loads	\$0.050
	DLC Medium C&I Average	\$0.048
TOU Rate	Office Building	\$0.051
	Warehouse	\$0.048
	Hotel	\$0.050
	DLC Medium C&I Average	\$0.048

Bill Analysis Takeaways

- EV load can respond to price signals more effectively than other C&I loads
 - The greatest benefit of a TOU rate is associated specifically with EV load
 - The EV-TOU rate may reduce C&I EV load bills by up to 50%
- Other loads can also benefit from TOU rates
 - But in cases where existing loads are less flexible, customers may perceive a whole-premises TOU rate as risky
 - On the EV-TOU rate, there may be more perceived risk for C&I customers whose load is primarily non-EV and not flexible
 - This could be a barrier to EV-TOU rate acceptance and EV adoption
- Though separating EV load requires an additional meter, we recommend giving the customer the choice – “optionality is best”
 - Larger customers in particular may be willing to pay additional metering costs to benefit from TOU rates for EV charging

Fuel Cost Savings

- For EVs charging overnight, the proposed TOU rate reduces supply costs by \$0.0225/kWh
 - The cost of driving 100 miles is reduced by \$0.64
 - This is equivalent to a reduction in the price of gasoline of \$0.27/gallon for an ICE vehicle
- In 2021, the EIA Annual Energy Outlook projects gasoline costs of \$2.64/gallon
 - The savings associated with the EV TOU rate is about 10% of the fuel cost per mile for an ICE vehicle
- If EV fleets charge entirely during off peak hours, supply costs would be reduced by \$0.025/kWh
 - This equates to a reduction in the price of gasoline of \$0.30/gallon
 - This is about 11% of the fuel cost per mile for an ICE vehicle

Discussion of Peak to Off-peak Ratios

- DLC has proposed a peak to off-peak ratio of about 3.5 (see table below) based on a combination of:
 - Historical PJM LMPs (2016-2019) and
 - 2021-2022 cleared capacity prices
- All capacity costs are associated with the on-peak period, which increases the peak to off peak ratio
- The peak, shoulder, and off-peak periods do not depend on the day of the week or on the season
 - Emphasis on simplicity over maximization of the peak to off peak ratio (tradeoff)
 - Synapse could examine hourly LMPs to design a rate that has more variation (less simple) but a higher peak to off-peak ratio (better price signal)

Rate Factor

		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>
2021/2022 Rate Factor				
	2016	1.66	0.64	0.45
	2017	1.66	0.64	0.48
	2018	1.59	0.71	0.48
	2019	1.70	0.61	0.46
	Average	1.65	0.65	0.47

Source: DLC filing Exhibit DBO-4, lines 22-26

Discussion of 200 kW cap

- The 200 kW cap is related to the specific class of C&I customers, as larger C&I customers already have the option of a time-varying rate
- Without separating the EV and non-EV load, there is a risk that the additional EV load would “tip” the C&I customer over the 200 kW limit
 - This could create additional risk for the customer
 - A separate meter and rate would allow small to medium C&I customers to stay on their existing rates and reduce risk

Discussion of FPFR Contract

- Page 16 of DLC’s filing states that “[t]he Company will obtain default service supply for EV-TOU customers through the same FPFR products that provide default service supply for the respective customer classes.”
- FPFR = Fixed-price full requirements
- If DLC is required to balance any revenues or losses associated with the TOU rate, this defeats the purpose of designing a TOU rate to lower wholesale energy costs.



Awaiting Information through Discovery

- Information about DLC's FPFR contract structure and the ability for TOU rates to reduce the utility's wholesale costs

KAH-102: DLC Resp. to Interrog. NRDC-I-7

Natural Resources Defense Council
(NRDC)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl and Emily Phan-Gruber

NRDC Set I-7

7. Refer to the Direct Testimony of David B. Ogden, page 16, lines 21-22 and page 17, lines 1-3.
- (a) Was avoiding the need to purchase and install a separate meter the principle reason for designing the EV-TOU pilot to apply to a participant's whole house load rather than just the EV load? Please detail any other considerations that factored into this design decision.
 - (b) Did the Company evaluate the costs and feasibility of installing separate meters for TOU pilot rate participants that would measure only the EV charging load? If so, please provide any information the company has assembled regarding the costs and feasibility of installing separate meters to measure EV charging load.

Response:

7(a): Yes, given the additional cost, time and effort required on the part of a customer associated with the installation of a separate meter, the Company believes that a whole-premise approach was the best option for our customers at this time. We believe this approach, which reduces upfront barriers for the customer, is likely to generate the highest customer adoption of the EV TOU rate. In their survey of utilities offering EV TOU rates, SEPA found that EV rates with "free enrollment and no additional metering cost have enrollment 1.7x higher than rates with an additional cost to enroll" (Smart Energy Power Alliance. Residential Electric Vehicle Rates That Work. November 2019.). See also NRDC-I-5.

Customers have the option of setting up a separate service and second meter exclusively for EV charging if that is their preference, but the Company did not want to make such separate service a requirement for customers to access the EV TOU rate.

Natural Resources Defense Council
(NRDC)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl and Emily Phan-Gruber

NRDC Set I-7

7(b) The Company considered Xcel Energy's Residential EV Service Pilot in Minnesota, where Xcel Energy found based on contractor estimates that not requiring a separate service with second meter saved participating customers an average of \$2,196 (Xcel Energy. Northern States Power Company's Annual Report on Residential Electric Vehicle (EV) Charging Tariff and Residential EV Service Pilot. Docket Nos. E002/M-15-111 and E002/M-17-817. May 31, 2019.).

Xcel's analysis found that cost for customers is highly dependent on a range of factors including the amount of wiring required, existence of a 240V dedicated circuit, and location of supply panel in relation to the charging location.

The Company expects that commercial customers would experience costs at this level or potentially higher depending on the location and set-up of the charging stations.

KAH-103: DLC Resp. to Interrog. NRDC-II-2

Natural Resources Defense Council
(NRDC)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set II

Witness: David B. Ogden

NRDC Set II-2

2. Please explain the customer class reconciliation details of Rider No. 8 - DSS 1307(e) referenced in paragraph 52 on Page 16 of the Company's Petition. In particular, will any revenue mismatches be reconciled within EV-TOU customers only or will revenue mismatches be reconciled within the entire small and medium commercial customer classes?

Response:

Refer to Statement No. 4, page 19, line 13 through page 20, line 2 for a description of the Company's proposal to reconcile the revenues collected from EV-TOU customers and the associated supply costs. Also refer to Statement No. 4, page 29, lines 10-22 for a description of the customer class reconciliation periods.

KAH-104: DLC Resp. to Interrog. NRDC-II-1

Natural Resources Defense Council
(NRDC)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set II

Witness: Scott Fisher and Jamie Davis

NRDC Set II-1

1. With regard to the Company's statement in paragraph 52 on Page 16 of its Petition stating that "[t]he Company will obtain default service supply for EV-TOU customers through the same FPFRR products that provide default service supply for the respective customer classes," will the structure of these supply contracts enable the Company to pay reduced wholesale energy supply costs when customers shift their electricity consumption to off peak hours in response to the TOU rate price signal? If so, please explain how this is possible given the FPFRR contract structure. If not, please explain why the Company has selected this contract structure to serve customers on a TOU rate.

Response:

An FPFRR product supplier will be paid the same price for a megawatt-hour of supply regardless of what proportion of its supply is for EV-TOU Pilot Program customers. To the extent that customers elect the EV-TOU Pilot Program and shift their usage to lower-priced periods or reduce their usage during higher-priced periods, the underlying market-based cost to supply the customers could be reduced, resulting in lower FPFRR supplier bid prices over time. Accordingly, bidders in the DSP IX FPFRR product solicitations could submit lower bids based on their expectations about customer enrollment and the associated load shifting and/or reductions.

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for)
Approval Of Default Service Plan For The)
Period June 1, 2021 Through May 31, 2025)
_____)

Docket No. P-2020-3019522

REBUTTAL TESTIMONY OF KATHLEEN HARRIS

NRDC Statement No. 2

August 14, 2020

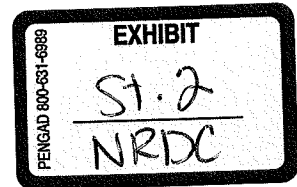


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IV. CONCLUSION10

1 **I. INTRODUCTION**

2 **Q. Please state for the record your name, position, and business address.**

3 A. My name is Kathleen Harris. I am employed by Natural Resources Defense Council
4 (“NRDC”) as a Clean Vehicles and Fuels Advocate. My business address is 40 W 20th Street,
5 New York, New York 10011.

6 **Q. What is the purpose of your testimony?**

7 A. I am responding to certain issues raised in direct testimony filed by other witnesses in this
8 case on July 17, 2020 regarding the electric vehicle time-of-use rate (“EV-TOU”) pilot
9 program proposed as part of Duquesne Light Company’s (“DLC” or “Company”) Default
10 Service Plan. Specifically, I respond to:

- 11 • The testimony of the EGS Parties’ witness Christopher H. Kallaher concerning
12 the benefits of the EV-TOU rate for the electric vehicle (“EV”) market, and
- 13 • The testimony of Coalition for Affordable Utility Services and Energy
14 Efficiency in Pennsylvania (“CAUSE-PA”) witness Harry Geller regarding
15 their recommendation for data collection of customers who elect to be on the
16 EV-TOU rate.

17 **Q. Are you sponsoring any exhibits?**

18 A. Yes. I am sponsoring the following exhibits:

19 KAH-105: DLC Resp. to Interrog. NRDC-I-8

20 KAH-106: EGS Parties’ Response to Interrog. DLC-I-1

21 **Q. Please summarize NRDC’s recommendations.**

22 A. As stated in my opening testimony, NRDC recommends that the Commission approve
23 DLC’s EV-TOU program with modifications. All intervenors in this proceeding who discussed

1 the EV-TOU rate, except for the EGS parties, agreed that the program should be approved.

2 Providing customers with the opportunity and price signals to shift charging to off-peak hours

3 not only helps save customers money on “fueling” their vehicles, but also optimizes the use of

4 the grid, especially as more EVs enter the market. To improve the EV-TOU program and

5 ensure maximum benefits of shifting charging to off-peak hours, NRDC recommends the

6 following program modifications:

7 1. The EV-TOU program should not be a pilot, but should instead be a standard
8 offering of the Company; and

9 2. The Company should educate customers about the tradeoffs between using
10 whole-premises TOU rates with a single meter and having their EV load separately
11 metered, and should ensure that DLC communicates to its customers about the
12 option of separate EV metering, especially in light of the potential effects on small
13 all and medium C&I customers with loads of under 200 kW and the potential for
14 the EV load to push customers over their 200-kW limit.

15 ChargePoint’s comments on the DSP support many of NRDC’s positions outlined in my
16 direct testimony, especially around the importance of EV-Only TOU rates¹ and “... ensur[ing] that
17 the increased adoption of EVs leads to beneficial load growth across the grid.”² Further,
18 ChargePoint reiterates NRDC’s position requesting that the Commission also look at additional

¹ ChargePoint Comments, Filed July 17, 2020 at pg. 5 “A TOU rate that applies only to EV load could be more attractive to customers, especially those unable to shift majority of load at their premises, and therefore shift more flexible EV charging load to off-peak periods further increasing utilization of the grid and providing greater benefits to all customers in Duquesne’s territory.”

²*Id.* at pg.4

1 rate options for C&I customers, especially as they relate to public direct current fast charging
2 stations.³

3 **II. RESPONSE TO EGS WITNESS KALLAHER**

4 **Q. What is your response to EGS Witness Kallaher's request that the Commission deny**
5 **Duquesne's EV-TOU rate?**

6 A. Mr. Kallaher's concerns are misplaced and his request should be rejected. Mr. Kallaher
7 argues that in the January 23, 2020 Secretarial Letter⁴ the EDCs were directed not to propose
8 EV-TOU rates in their DSPs, but to instead convene a stakeholder process to "discuss possible
9 approaches to providing consumer [*sic*] with EV TOU rates."⁵ Respectfully, that is not what the
10 Secretarial Letter says. The letter states "Accordingly, we urge all parties participating in the
11 upcoming DSP proceedings to consider how EV specific TOU rate offerings could be made
12 available to consumers."⁶ The Company's proposal of an EV specific TOU rate in this
13 proceeding is the product of consideration of how such rates could be made available to
14 customers, and the testimony presented by NRDC as well as other parties constitutes further
15 consideration. In other words, what is happening in this proceeding appears to be exactly what
16 the Secretarial Letter urged. Moreover, the Company's proposing its EV-TOU rate as a pilot is,
17 in effect, a proposal to consider making the rate a standard offering after evaluation of the pilot.
18 That said, as I argued in my opening testimony, I believe that the Company's program should be

³ *Id.* at pg. 3 "ChargePoint notes that TOU rates may not be a perfect application for certain publicly available charging stations that are used by EV drivers that cannot adjust their usage to avoid the impact of higher priced TOU time periods."

⁴ Docket M-2019-3007101, Secretarial Letter at pgs. 6-7.

⁵ EGS Witness Kallaher at pg. 20

⁶ *Id.*

1 approved as a standard offering due to the numerous examples of successful EV-TOU rates in
2 other jurisdictions.

3 Mr. Kallaher further explains that “Duquesne chose to [develop an EV-TOU rate]
4 themselves, without any evidence that there were other options available that would have made
5 use of the competitive market rather than circumventing it.”⁷ The point of this criticism is
6 unclear. If the ESG parties wish to propose “other options” as alternatives to the Company’s
7 proposed EV-TOU rate, they are free to do so. In fact, though, Mr. Kallaher does not provide
8 any examples of alternatives that would achieve the same outcomes and benefits of an EV-TOU
9 rate (i.e. shifting charging to off-peak hours when the grid is underutilized). Further, the
10 Company’s proposal in no way prevents the competitive supplier market from implementing EV-
11 TOU rates or other programs that will shift charging to off-peak hours.

12 **Q. What is your response to Mr. Kallaher’s claim that the EV-TOU rate will have a**
13 **“strongly negative impact on the continued development of the competitive market in**
14 **Pennsylvania.”**⁸

15 A. Mr. Kallaher expresses a series of concerns on how the EV-TOU rate will affect
16 competitiveness in Pennsylvania, however, he does not provide any examples or evidence that
17 this has taken place in any of the jurisdictions that have implemented EV-TOU rates, despite the
18 fact that such programs have been in place for several years. Further, EDC efforts to implement
19 EV-TOU rates do not prevent the EGSs from developing programs to also shift charging to off-
20 peak hours—in fact, the EGS parties should be encouraged to propose similar programs.

⁷ *Id.*

⁸ *Id.*

1 Mr. Kallaher goes on to argue that the EV market is nascent, and therefore that it is too
2 early for EDCs to be involved in this process. On the contrary—I believe it is vital that EDCs
3 begin considering the impacts of electric vehicles on the grid prior to widespread EV adoption.
4 Entering into this space during the nascent market allows for EDCs to implement these policies
5 and slowly scale up implementation, as opposed to trying to integrate a new rate when there are
6 tens of thousands of vehicles on the road in the Company’s service territory.

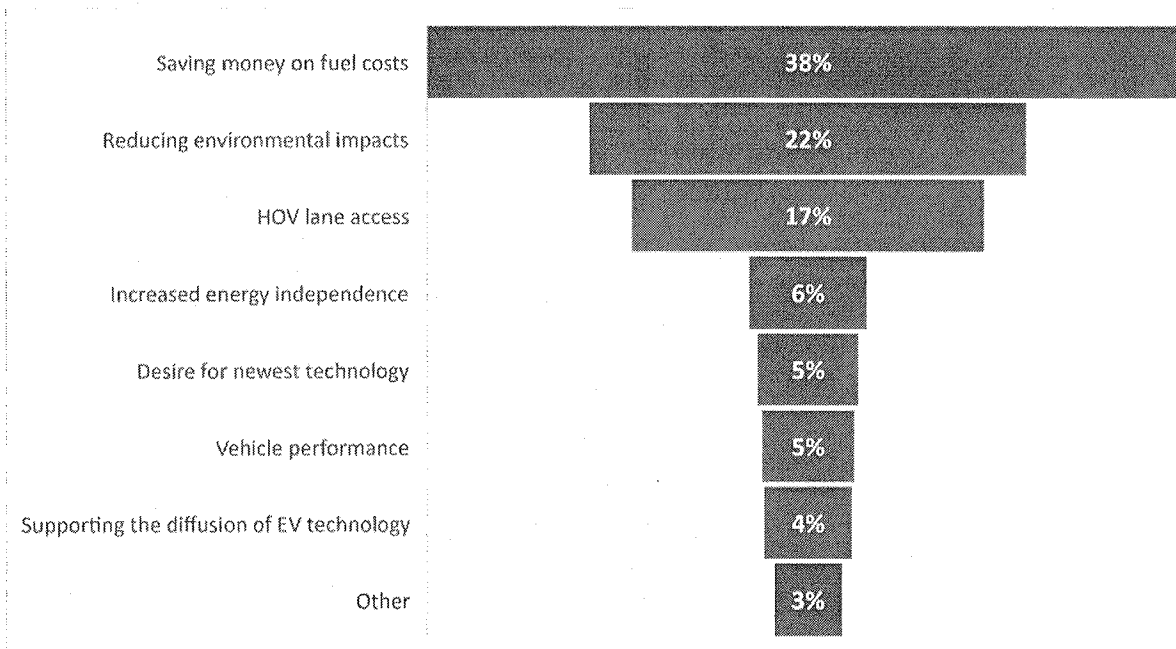
7 **Q. Are EV-TOU rates important to expanding the EV market?**

8 A. Mr. Kallaher also argues that since the Secretarial Letter states that “... TOU rates...
9 needs[*sic*] to be explored further, especially whether the lack of TOU rate offerings for operators
10 of EVs presents a barrier to EV adoption.”⁹ EV-TOU rates provide many benefits to
11 Pennsylvanians: reducing fueling costs, putting downward pressure on rates, and shifting
12 charging to off-peak hours. A survey of nearly 20,000 EV drivers reveals “Saving money on fuel
13 costs” is the single biggest motivator of EV purchase decisions in California.

⁹ *Id.* at pg. 21

1

Figure 1: Most Important Reason to Acquire an EV¹⁰



2

3 EV-TOU rates, especially those that have strong price signals that are seen by the end-
4 users, such as those proposed in this DSP, help EV drivers save money on fueling costs and by
5 doing so will, motivate additional EV purchases.

6 **Q. What is your response to Mr. Kallaher's specific proposal with respect to EV-specific**
7 **TOU rates?**

8 A. Mr. Kallaher recommends convening a working group to discuss "1) whether the absence
9 of EV-specific TOU rates is, in fact, a barrier to EV adoption in Pennsylvania; (2) if so, what is
10 the cause of the absence of EV-specific TOU rates; and (3) what steps should be taken to
11 overcome those barriers to the development of EV-specific TOU rates without stifling the
12 development of the competitive market in this area?"¹¹

¹⁰ Center for Sustainable Energy, *California Plug-in Electric Vehicle Owner Survey Dashboard* (available at <https://cleanvehiclerebate.org/eng/survey-dashboard/ev>).

¹¹ *Id.* at pgs. 21-22.

1 As previously discussed, this is an unnecessary process that will only delay
2 implementation of an EV-TOU rate. It has been proven in other jurisdictions that EV-TOU rates
3 reduce fueling costs, leading to an increase in EV purchases. It is irrelevant what the cause of the
4 past absence of EV-TOU rates is, and since the Company has proposed EV-TOU rates, they have
5 clearly determined how to “overcome these barriers.” Indeed, one of the self-evident “cause[s] of
6 the absence of EV-specific TOU rates,” is that no EGS in Pennsylvania currently offers one.¹²
7 The Company’s proposal provides an impetus, rather than a hindrance, for generation suppliers
8 operating in the Company’s service area to follow suit and prepare their own offerings for this
9 nascent market.

10 **III. RESPONSE TO CAUSE-PA WITNESS GELLER**

11 **Q. What is your response to Witness Geller’s thoughts on the Company’s decision to exclude**
12 **CAP customers from its proposed EV-TOU rate?**

13 A. I agree, and support Witness Geller’s position that TOU rates are not compatible with
14 CAP.¹³ However, the Commission should consider additional ways to ensure that CAP
15 customers are able to benefit from clean transportation opportunities, including supporting
16 medium-and-heavy duty vehicle electrification. As Mr. Geller notes in his testimony
17 “...economically vulnerable households often have very little discretionary energy usage, such
18 as washing machines, dish washers, and other large appliances, and are more likely to live in
19 smaller homes with less efficient heating and cooling spaces – all factors which make it
20 difficult to shift load during peak periods.”¹⁴ This further supports the recommendation in my

¹² See Ex. KAH-106 (EGS Parties’ response to Interrog. DLC-I-1, noting witness Kallaher is unaware of any EGS in Pennsylvania that currently offers an EV-TOU rate.

¹³ NRDC also supports CAUSE-PA’s argument that CAP customers should not have the option of shopping at all.

¹⁴ CAUSE-PA Witness Geller Direct Testimony at pg. 22, filed July 17, 2020.

1 opening testimony that customers be given the option for an EV-only TOU rate to reduce risk
2 associated with loads that are unable to shift to off-peak hours.¹⁵

3 **Q. What is your response to Witness Geller’s statement about the need to ensure that “low-**
4 **income households who cannot afford to adopt an electric vehicle are not subsidizing**
5 **electric vehicle adoption by higher income household.”**

6 A. Witness Geller testifies that a holistic evaluation of demographic data is important
7 “...given Duquesne is proposing to recover the costs of marketing the EV-TOU rate from
8 default service customers – rather than from EV-TOU participant,”¹⁶ and posits that
9 “Duquesne’s proposed EV-TOU rate generally benefits higher income individuals, who can
10 afford to purchase or lease an electric vehicle...” Assuming, for the sake of argument, that
11 100 percent of customers who use the EV-TOU rate between now and 2025 will be higher-
12 income individuals, I still believe that the modest investments in education and outreach that
13 the Company is proposing during this period are in the public interest. As I discussed in my
14 opening testimony, electric vehicles generate net revenue in excess of the cost to serve their
15 load, and thereby put downward pressure on rates for all consumers.¹⁷ If the Company targets
16 its education and outreach about the benefits of EV-TOU rates to all of its customers (not just
17 current EV owners), then EV adoption among the customers can be expected to accelerate,
18 thereby increasing the downward pressure on rates to the benefit of all customers.

19 **Q. What is your response to Witness Geller’s recommendations regarding “monitor[ing]**
20 **customer response to the EV-TOU Pilot Program?”**

¹⁵ Harris Direct Testimony at pg 12.

¹⁶ CAUSE-PA Direct Testimony at pg. 25

¹⁷ *Id.* at pg. 6

1 A. While I agree that a third-party evaluation of the EV-TOU rate may be appropriate to
2 monitor success, and that some data collection is necessary to evaluate the program, I am
3 concerned that the collection the demographic data recommended by Mr. Geller may deter
4 customers from participating on the EV-TOU rate due to privacy concerns. I would support
5 the collection of demographic information from residential customers if it can be done in a
6 way that does not deter participation because of privacy concerns. I would also support the
7 collection of demographic data from C&I customers, such as the type of customer (workplace,
8 multi-unit dwelling, commercial business, etc.), number of EVs in the fleet, number of
9 employees, etc.

10 **Q. What is your response to Witness Geller's commentary on the EV-TOU rate as it relates**
11 **to small and medium C&I customers with <200kW usage?**

12 A. Witness Geller argues that customers over 200 kW should also be eligible for an EV-
13 TOU rate. I agree that the Commission should support rates that shift charging to off-peak hours
14 for large C&I customers. As discussed in my direct testimony,¹⁸ I also agree that supporting
15 medium-and-heavy duty electrification—which may have loads of larger than 200 kW—will be
16 important to ensure that all Pennsylvanians have access to clean transportation, regardless if they
17 own a personal vehicle. However, guidance on how to support these vehicles should not wait
18 until the next DSP, as recommended by Witness Geller.¹⁹ Instead, the Commission should
19 release guidance on supporting medium- and heavy-duty vehicle charging in the near term.

¹⁸ Harris Direct Testimony at pg. 15.

¹⁹ *Id.*

1 As I understand it, large C&I customers with loads of over 200 kW have access to their
2 own TOU rates, which is why they are excluded from this EV-TOU rate.²⁰ However, additional
3 analysis will need to be conducted to determine how the TOU rates for customers with loads
4 over 200 kW compares to the EV-TOU rates that will be available to small and
5 medium C&I customers. This analysis will be especially important to consider the effects of the
6 EV-TOU rate on >200kW customers whose additional EV load may put them in a higher service
7 class without separately metered EV load.

8 **IV. CONCLUSION**

9 **Q. What are your concluding thoughts on the Program?**

10 A. As I stated in my direct testimony, the EV-TOU rate should be approved, with
11 modifications to ensure widespread adoption of this rate to maximize off-peak hours and the
12 benefits to all utility customers through the downward pressure on rates, specifically:

- 13 1. The EV-TOU program should not be a pilot, but should instead be a standard
14 offering of the Company; and
- 15 2. The Company should educate customers about the tradeoffs between using
16 whole-premises TOU rates with a single meter and having their EV load separately
17 metered, and should ensure that DLC communicates to its customers about the
18 option of separate EV metering, especially in light of the potential effects on small
19 all and medium C&I customers with loads of under 200 kW and the potential for
20 the EV load to push customers over their 200-kW limit.

²⁰ Ex. KAH-105 (Company response to NRDC Interrogatory I-8)

1 Further, the concerns raised by EGS regarding the EV-TOU should be ignored as there is
2 no proof that an EV-TOU rate will stifle competition, and data shows the EV-TOU rates are
3 an incentive for drivers to purchase EVs by reducing fueling costs.

4 **Q. Does this complete your rebuttal testimony?**

5 A. Yes.

KAH-105: EGS Parties' Response to Interrog. DLC-I-1

Natural Resources Defense Council
(NRDC)
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: David B. Ogden

NRDC Set I-8

8. Explain the Company's decision to limit enrollment in the EV-TOU pilot to just those customers with demand below 200 kW.

Response:

Default service customers that use on average 200 kW and above are assigned to Rider No. 9 – Day-Ahead Hourly Price Service. Thus, these customers are already assigned to a time-of-use rate. Per DLC Statement No. 4, Page 14, lines 21-22 and Page 15, line 1, “customers eligible for Rider No. 9 – Day-Ahead Hourly Price Service will not be eligible for the EV-TOU Pilot Program, and they will not bear any of the costs associated with the program”.

KAH-106: DLC Resp. to Interrog. NRDC-I-8

**RESPONSES OF THE EGS PARTIES
INTERROGATORIES AND REQUESTS
FOR PRODUCTION OF DOCUMENTS PROPOUNDED BY
DUQUESNE LIGHT COMPANY, SET I**

DOCKET NO. P-2020-3019522

- 1) Reference page 21, lines 7-9 of Mr. Kallaher's direct testimony. Is Mr. Kallaher aware of any electric generation suppliers in Pennsylvania that offer an electric vehicle-specific time-of-use rate or program?

RESPONSE: No.

Provided By: Chris Kallaher

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

**Petition of Duquesne Light Company for)
Approval of Default Service Plan For The)
Period June 1, 2021 Through May 31, 2025)
_____)**

Docket No. P-2020-3019522

SURREBUTTAL TESTIMONY OF KATHLEEN HARRIS

NRDC Statement No. 3

August 28, 2020

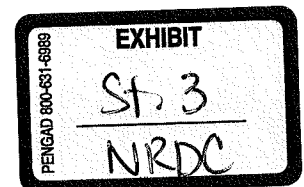


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IV. CONCLUSION6

1 **I. INTRODUCTION**

2 **Q. Please state for the record your name, position, and business address.**

3 A. My name is Kathleen Harris. I am employed by Natural Resources Defense Council
4 (“NRDC”) as a Clean Vehicles and Fuels Advocate. My business address is 40 W 20th Street,
5 New York, New York 10011.

6 **Q. Have you previously submitted testimony in this proceeding?**

7 A. Yes. My direct testimony is set forth in NRDC Statement No. 1 and my rebuttal testimony
8 is set forth in NRDC Statement No. 2.

9 **Q. What is the purpose of your surrebuttal testimony?**

10 A. I am responding to certain issues raised in rebuttal testimony filed by other witnesses in
11 this case on August 14, 2020 regarding the electric vehicle time-of-use rate (“EV-TOU”) pilot
12 program proposed as part of Duquesne Light Company’s (“DLC” or “Company”) Default
13 Service Plan. Specifically, I respond to:

- 14 • The rebuttal testimony of DLC witness Katherine Scholl regarding C&I
15 customers with loads of over 200 kW and ensuring price signals are seen by EV
16 drivers; and
- 17 • The rebuttal testimony of the EGS Parties’ witness Christopher H. Kallaher
18 concerning the Company’s implementation of an EV-TOU rate and its effects
19 on the competitive market.

20 **Q. Are you sponsoring any exhibits?**

21 A. Yes. I am sponsoring the following exhibits:
22 KAH-107: Synapse Energy Economics, Inc. analysis, August 2020

23

1 **II.RESPONSE TO DLC WITNESS SCHOLL**

2 **Q. What is your response to Witness Scholl’s commentary on the 200 kW peak demand**
3 **limit for its proposed EV-TOU rate and Mr. Geller’s recommendation that the Company**
4 **develop an EV TOU rate for mass transit in its next DSP filing?**

5 A. I encourage the Company to develop sustainable, long-term rates for large commercial
6 and industrial (C&I) customers, not just for mass transit customers. In doing so, the Company
7 should consider the unique characteristics of C&I customers and follow best practices, such as
8 are highlighted in the Synapse report “Best Practices for Commercial and Industrial EV Rates,”
9 that I discussed in detail in my opening testimony.¹

10 As I stated in my original and rebuttal testimony, if the Company implements a EV-TOU
11 rate on a whole-premise basis with a 200 kW peak demand limit, some EV charging could
12 inadvertently “tip” some C&I customers over the 200 kW limit.² In her rebuttal testimony, Ms.
13 Scholl highlights that commercial and industrial (“C&I”) customers with demands above 200
14 kW that are not eligible for the EV-TOU have the option of taking hourly-priced service under
15 the Company’s Rider No. 9.³

16 However, for some large C&I customers that would “tip” over 200 kW demand because
17 of EV charging, the use of Rider No. 9 would result in higher rates than if the customer stayed on
18 the EV-TOU rate through the use of submetering for its EV charging. Analysis from Synapse
19 Energy shows that were a large C&I customer to exceed the 200 kW peak demand limit and be
20 moved to Rider No. 9 from the TOU rate, offices and warehouses would see an increase in their

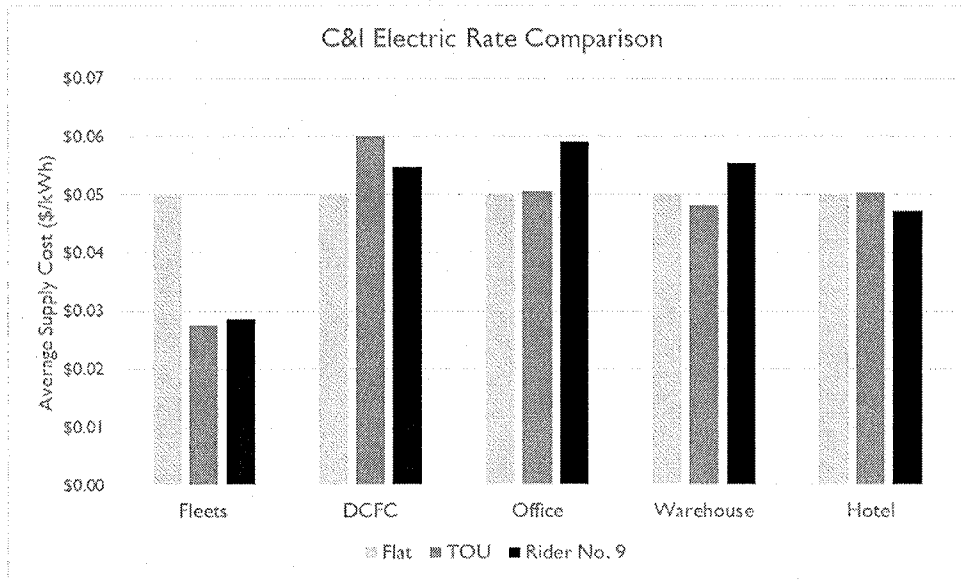
¹ Harris Direct Testimony at 20.

² *Id.* at 18.

³ Scholl Rebuttal testimony at 30.

1 average supply cost (Figure 1). This further highlights the importance of providing education to
2 C&I customers on the benefits of EV-Only TOU rates and continuing to allow the optionality of
3 customers to meter EV load separately from non-EV load.

4 Figure 1: C&I Electric Rate Comparison⁴



5
6 **Q. What is your response to Ms. Scholl’s comments on passing EV-TOU price signals to**
7 **EV drivers?**

8 A. I disagree with Ms. Scholl’s objections to passing TOU price signals through to drivers—
9 on the basis that “...at this nascent stage of the EV market...it is important for commercial and
10 industrial (“C&I) customers offering EV Charging... to determine the pricing approach that
11 works best for them”—and note that this emphasis on site host pricing flexibility is entirely
12 consistent with a default arrangement that allows sites hosts to opt out.⁵ Establishing the pass-
13 through of TOU rates as the default arrangement for EVSEs owners by third parties would help

⁴ See Ex. KAH-107

⁵ *Id.* at 32.

1 ensure grid benefits and fuel cost savings while still adequately preserving site host flexibility
2 and allowing site hosts to implement alternative pricing arrangements. As I discussed in my
3 opening testimony, unless the end users see the price signals, they will have little reason or
4 incentive to shift charging to off-peak hours.⁶ To ensure that EV drivers see the price signals, the
5 Company should make the pass-through of TOU rates the default arrangement, as multiple
6 utilities across the country have already implemented (including Consumers Energy Company in
7 Michigan and Southern California Edison in California).⁷

8 Most recently, Southern California Edison made the pass-through of TOU rates the
9 default arrangement for their Charge Ready 2 program, while allowing site hosts the flexibility to
10 opt out of this default arrangement and implement custom pricing arrangements. The California
11 Public Utility Commission found that "...establishing a default arrangement that site hosts pass
12 through TOU price signals to drivers would promote charging in a manner that is consistent with
13 grid conditions, offer the opportunity for drivers to realize fuel cost savings, and preserve
14 flexibility to accommodate site host operational needs," and that this was reasonable and
15 consistent with state law to accelerate widespread transportation electrification.⁸

⁶ *Id.* at 8.

⁷ Case No. U-20134, Direct Testimony of Michael Delaney, 4 TR 1043-44 (stating that the "default charging option will be for site hosts to pass through the Company TOU rate to customers." The Minnesota Public Utilities Commission also saw the necessity of adopting such an arrangement in approving an Xcel Energy EV charging program, noting: "The Commission hereby modifies the Public Charging tariff to condition participation in the pilot program on agreement by site hosts to have a default time-differentiated rate structure that reflects the on-peak and off-peak time periods of Xcel's Pilot tariff and an energy rate differential ratio of at least 2:1. However, site hosts may opt out of the default arrangement at their discretion to set pricing that reflects other considerations or needs, provided that such prices are reported to the utility for purposes of Xcel's annual reporting." *Order Approving Pilots With Modifications, Authorizing Deferred Accounting, and Setting Reporting Requirements*, DOCKET NO. E-002/M-18-643, Minnesota Public Utilities Commission, issued July 17, 2019, at 22.

⁸ A.18-06-015, Application of Southern California Edison Company (U338E) for Approval of its Charge Ready 2 Infrastructure and Market Education Programs, available at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M345/K697/345697175.pdf>.

1 Following Southern California Edison’s commitment, the California PUC ordered that
2 the Company “shall establish the pass-through time-of-use price signals to drivers as the default
3 arrangement, while allowing site hosts to opt out of this arrangement and implement their own
4 pricing plans. SCE must work with any sites that do not pass through TOU signals to establish
5 load management tactics to reduce grid impacts from the sites and report on these load
6 management tactics within its annual report.”⁹ To realize grid benefits and the fuel cost savings
7 that motivate EV purchase decisions, the Commission should ensure time-of-use prices are
8 generally passed through to drivers by default.

9 **III. RESPONSE TO EGS WITNESS KALLAHER**

10 **Q. What is your response to Witness Kallaher’s comment that “... the benefits of EVs and**
11 **their incorporation into the grid could ... be achieved through the competitive market?”¹⁰**

12 A. Like the Company,¹¹ I support the offering of EV-TOU rates by EGS. And as I explain
13 further in my rebuttal testimony, DLC’s implementation of an EV-TOU rate by no means
14 precludes EGS’ from developing their own TOU rates. Nor has Mr. Kallaher provided any data
15 showing that utility programs that shift charging to off-peak hours reduces competition when
16 EGSs do offer their own EV-TOU rates. Mr. Kallaher is correct that “the growing number of
17 EVs on the road in Duquesne’s service territory and throughout Pennsylvania represents an
18 extraordinary opportunity for EGSs and other plays in the electricity value chain.”¹² I encourage
19 the EGS to seize that opportunity for the same reason I support the Company’s offering of an

⁹ *Id.* at 131.

¹⁰ Kallaher Rebuttal Testimony at 9.

¹¹ *See id.* at 22

¹² *Id.*

1 EV-TOU rate in the instant matter; namely, because of the various benefits I have discussed in
2 my direct and rebuttal testimony.

3 **IV. CONCLUSION**

4 **Q. Does this complete your surrebuttal testimony?**

5 A. Yes.



Duquesne EV-TOU Rate Analysis for C&I Class

Results

August 26, 2020

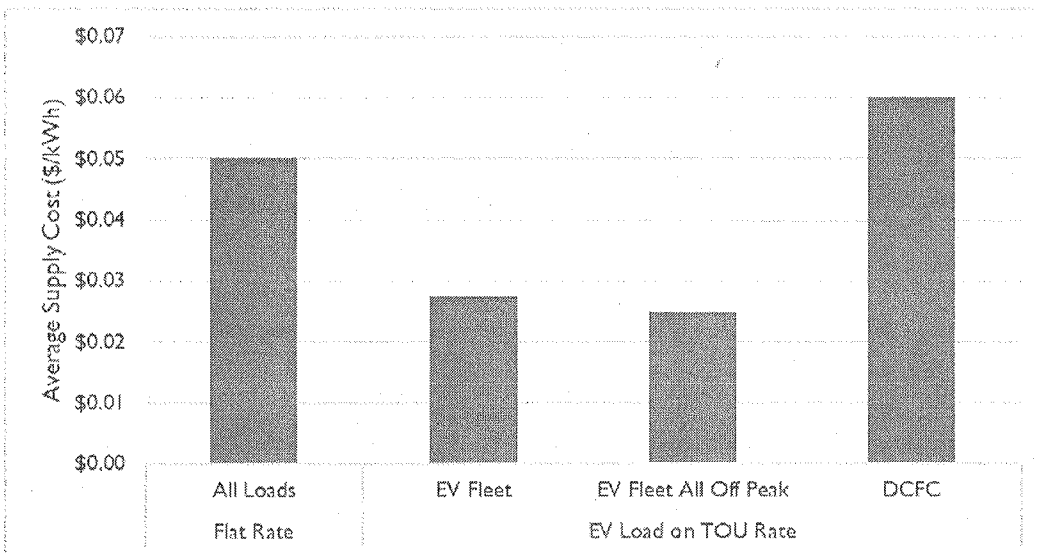
Erin Camp, PhD and Jason Frost

Synapse Model Overview

- This model estimates bill impacts for a typical small to medium C&I customer, aiming to understand how charging non-EV load on the EV-TOU rate impacts C&I customers
 - We compare electric bills for a C&I customer on DLC's EV-TOU rate for the entire premise's use of electricity to a C&I customer on DLC's EV-TOU rate for EV load only
- Additionally, we compare the impact of the TOU rate on EV charging cost per mile relative to the cost of gasoline per mile for a comparable internal combustion engine vehicle (ICE)
- Assumptions
 - EV fleets are charged between 9pm and 5am to avoid peak pricing
 - The flat supply rate is \$0.05/kWh, based on DLC's illustrative assumptions
 - Annual C&I load profiles for an office building, a warehouse, and a hotel were modeled to represent load from non-EV end uses, in addition to data from DLC

Preliminary Results

- C&I EV fleet load on the EV-TOU rate is cheaper than on the flat rate
 - Overnight charging provides the greatest opportunity for savings
- DCFC could face higher prices, as it is primarily used on peak
 - TOU may still be appropriate for DCFC relative to other options such as demand charges

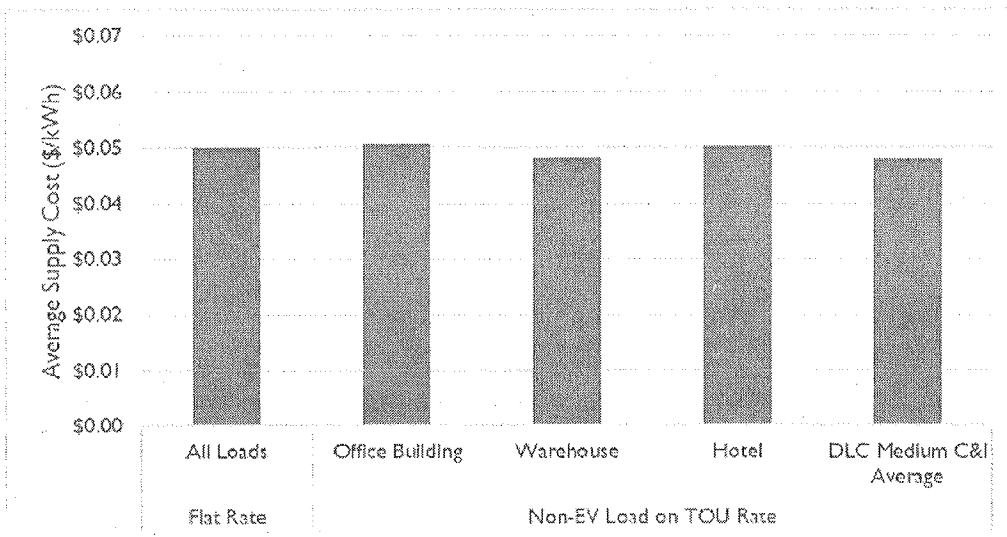


Average Supply Cost (\$/kWh)

Flat Rate	All Loads	\$0.050
	EV Fleet	\$0.028
TOU Rate	EV Fleet All Off Peak	\$0.025
	DC Fast Charging	\$0.060

Preliminary Results, cont.

- Office buildings, warehouses, and hotels face similar average TOU supply costs
 - Average rates are close to the flat rate
- C&I customers may see limited benefit and unnecessary risk in the TOU rate
- Note that DLC Medium C&I Average represents DLC data from March 2020



Flat Rate	All Loads	\$0.050
	DLC Medium C&I Average	\$0.048
TOU Rate	Office Building	\$0.051
	Warehouse	\$0.048
	Hotel	\$0.050
	DLC Medium C&I Average	\$0.048

Bill Analysis Takeaways

- EV load can respond to price signals more effectively than other C&I loads
 - The greatest benefit of a TOU rate is associated specifically with EV load
 - The EV-TOU rate may reduce C&I EV load bills by up to 50%
- Other loads can also benefit from TOU rates
 - But in cases where existing loads are less flexible, customers may perceive a whole-premises TOU rate as risky
 - On the EV-TOU rate, there may be more perceived risk for C&I customers whose load is primarily non-EV and not flexible
 - This could be a barrier to EV-TOU rate acceptance and EV adoption
- Though separating EV load requires an additional meter, we recommend giving the customer the choice – “optionality is best”
 - Larger customers in particular may be willing to pay additional metering costs to benefit from TOU rates for EV charging

Fuel Cost Savings

- For EVs charging overnight, the proposed TOU rate reduces supply costs by \$0.0225/kWh
 - The cost of driving 100 miles is reduced by \$0.64
 - This is equivalent to a reduction in the price of gasoline of \$0.27/gallon for an ICE vehicle
- In 2021, the EIA Annual Energy Outlook projects gasoline costs of \$2.64/gallon
 - The savings associated with the EV TOU rate is about 10% of the fuel cost per mile for an ICE vehicle
- If EV fleets charge entirely during off peak hours, supply costs would be reduced by \$0.025/kWh
 - This equates to a reduction in the price of gasoline of \$0.30/gallon
 - This is about 11% of the fuel cost per mile for an ICE vehicle

Discussion of Peak to Off-peak Ratios

- DLC has proposed a peak to off-peak ratio of about 3.5 (see table below) based on a combination of:
 - Historical PJM LMPs (2016-2019) and
 - 2021-2022 cleared capacity prices
- All capacity costs are associated with the on-peak period, which increases the peak to off peak ratio
- The peak, shoulder, and off-peak periods do not depend on the day of the week or on the season
 - Emphasis on simplicity over maximization of the peak to off peak ratio (tradeoff)
 - Synapse could examine hourly LMPs to design a rate that has more variation (less simple) but a higher peak to off-peak ratio (better price signal)

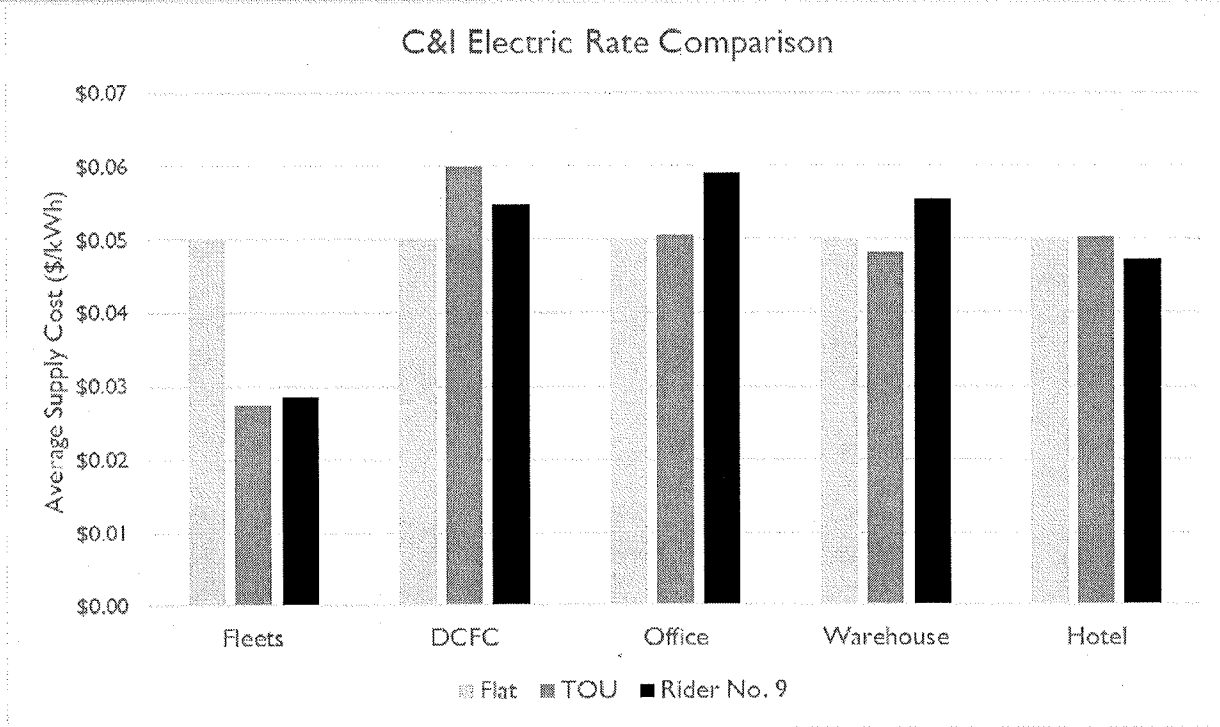
Rate Factor		<u>On Peak</u>	<u>Shoulder</u>	<u>Off Peak</u>
2021/2022 Rate Factor				
	2016	1.66	0.64	0.45
	2017	1.66	0.64	0.48
	2018	1.59	0.71	0.48
	2019	1.70	0.61	0.46
	Average	1.65	0.65	0.47

Source: DLC filing Exhibit DBO-4, lines 22-26

Discussion of 200 kW cap

- The 200 kW cap is related to the specific class of C&I customers, as larger C&I customers already have the option of a time-varying rate
- Without separating the EV and non-EV load, there is a risk that the additional EV load would “tip” the C&I customer over the 200 kW limit
 - This could create additional risk for the customer
 - A separate meter and rate would allow small to medium C&I customers to stay on their existing rates and reduce risk
- The tariff for C&I customers with a peak load greater than 200kW (Rider No. 9) is based on day-ahead hourly pricing, plus administrative charges, taxes, and capacity charges.
- Were a large C&I customer to exceed the 200 kW peak demand limit and be moved to Rider No. 9 from the TOU rate, offices and warehouses would see an increase in their average supply cost (see next slide).

Discussion of 200 kW cap (cont.)



	Flat	TOU	Rider No. 9
Fleets	\$0.05	\$0.03	\$0.03
DCFC	\$0.05	\$0.06	\$0.05
Office	\$0.05	\$0.05	\$0.06
Warehouse	\$0.05	\$0.05	\$0.06
Hotel	\$0.05	\$0.05	\$0.05

Discussion of FPFR Contract

- Page 16 of DLC’s filing states that “[t]he Company will obtain default service supply for EV-TOU customers through the same FPFR products that provide default service supply for the respective customer classes.”
 - FPFR = Fixed-price full requirements
- Residential and Small C&I rates are recalculated twice per year. Medium C&I are recalculated quarterly.
 - In principle, this seems often enough for load shifting to flow through to downward pressure on customer rates in a timely manner.
 - However, if DLC begins with a pilot TOU program, not many customers will be able participate at first. Downward pressure on rates likely won’t be noticeable to suppliers until it’s a broader program with more customers.
- Rates would be recalculated for the entire customer class—whether it’s Residential/Lighting, Small C&I, or Med C&I. This means that all members of a customer class would benefit from the load shifting of the customers on the EV-TOU rate, instead of just the TOU customers. We believe that the rate benefits of load shifting should be provided exclusively to those customers who are on the TOU rate and shifting their load. This helps to further incentivize adoption of EVs and shifting of load to off-peak hours.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**PETITION OF DUQUESNE LIGHT)
COMPANY FOR APPROVAL OF DEFAULT)
SERVICE PLAN FOR THE PERIOD) DOCKET NO.
JUNE 1, 2021 THROUGH MAY 31, 2025) P-2020-3019522
)
)**

**DIRECT TESTIMONY
OF
SERHAN OGUR
ON BEHALF OF THE
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE**

July 17, 2020

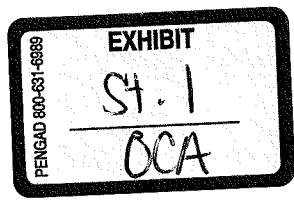


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DIRECT TESTIMONY OF SERHAN OGUR

I. INTRODUCTION

1

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A. My name is Serhan Ogur. I am a Principal at Exeter Associates, Inc. ("Exeter"). Our
4 offices are located at 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland,
5 21044.

6 Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND.

7 A. I received a B.A. degree in Economics from Bogazici University (Istanbul, Turkey) in
8 1996 and a Ph.D. in Economics from Northwestern University (Evanston, IL) in
9 2007.

10 Q. WHAT IS YOUR PROFESSIONAL BACKGROUND?

11 A. I have 19 years of experience in the energy industry specializing in organized
12 wholesale and retail electricity markets. My diverse background comprises energy
13 management and consulting; analysis, design and reporting of Regional Transmission
14 Organization ("RTO") electricity markets and products; and state and federal
15 regulation of electric utilities. I was employed as an Economic Analyst at the Illinois
16 Commerce Commission ("ICC") between 2001 and 2005; Senior Economist at PJM
17 Interconnection, LLC ("PJM") between 2005 and 2014; and Senior System Operator
18 at Fellon-McCord & Associates, LLC ("Fellon-McCord") between 2014 and 2015. I
19 came to Exeter as a Senior Analyst in 2015 and became a Principal in the firm in
20 2020. A detailed statement of my qualifications is included in Appendix A.

21 Q. HAVE YOU TESTIFIED AS AN EXPERT WITNESS IN OTHER
22 REGULATORY PROCEEDINGS?

23 A. Yes, I testified in Docket Nos. 05-160, 05-161, and 05-162 before the ICC. These
24 are the dockets that established a descending-price clock auction-based generation

1 service procurement for default service customers of major Illinois utilities,
2 Commonwealth Edison Company and the Ameren companies (AmerenCILCO,
3 AmerenCIPS, and AmerenIP) in 2005.

4 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

5 A. Yes, I testified in Docket No. P-2016-2534980 in PECO Energy Company's Default
6 Service Program IV proceeding; and in Docket Nos. P-2020-3019383 and P-2020-
7 3019384 in the joint Default Service Plan VI of Citizens' Electric Company of
8 Lewisburg, PA and Wellsboro Electric Company.

9 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
10 PROCEEDING?

11 A. My testimony addresses certain elements of the proposed Default Service Plan IX
12 ("DSP IX" or "Plan") of Duquesne Light Company ("DLC" or the "Company") for
13 providing default service to its residential customers for the 48-month period from
14 June 1, 2021 through May 31, 2025. The specific issues I address include the
15 wholesale power supply products to be procured to satisfy residential default service
16 requirements; the role of the independent auction monitor; the Electric Vehicle Time
17 of Use Pilot Program ("EV-TOU") proposed by DLC; and the structure of the
18 Company's proposed reconciliation adjustment. In addition, I address issues related
19 to a forthcoming DLC proposal to enter into a long-term Purchase Power Agreement
20 ("PPA") for energy and alternative energy credits (and possibly capacity and ancillary
21 services as well) to be supplied by a utility-scale solar facility.

22 Q. ARE YOU ADDRESSING ANY IMPLEMENTATION OR POLICY
23 ISSUES ASSOCIATED SPECIFICALLY WITH DEFAULT SERVICE FOR
24 COMMERCIAL OR INDUSTRIAL CUSTOMERS?

1 A. No, I am not. My testimony relates only to issues affecting the residential class.
2 However, some of the recommendations I make to improve the process for residential
3 customers may also impact the commercial and industrial customer classes.

4 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

5 A. Section I is an introduction. Section II presents a summary of the Company's
6 proposed Plan as it affects the residential class. Section III, the final section of my
7 Direct Testimony, provides a discussion of my recommendations concerning the
8 Company's proposed DSP IX, and addresses the proposed wholesale supply product
9 portfolio, the role of the independent auction monitor, the EV-TOU proposed by
10 DLC, the operation of the reconciliation charge, and the solar PPA that DLC plans to
11 file for approval with the Commission during the term of DSP IX.

12 Q. ARE YOU RECOMMENDING AN ALTERNATIVE DEFAULT SERVICE
13 SUPPLY PORTFOLIO FOR THE RESIDENTIAL CLASS?

14 A. No, I am not. I find DLC's proposed exclusive reliance on 12- and 24-month fixed-
15 price full-requirements ("FPFR") load-following supply contracts, as well as the
16 Company's reasoning for this choice, satisfactory.

17 Q. ARE THERE DESIRABLE FEATURES OF THE RESIDENTIAL
18 DEFAULT SERVICE PORTFOLIO PROPOSED BY DLC?

19 A. I find two features of DLC's proposed residential default service portfolio particularly
20 desirable. First, the overlapping or laddering of the delivery terms of the supply
21 contracts helps manage the market price risk for residential default service customers
22 by not subjecting them to price changes on the full portfolio at any one time. Second,
23 the overhanging contracts avoid the "hard stop" problem and the associated market
24 price risk that residential default service customers would otherwise face at the
25 conclusion of DSP IX.

1 Q. ARE YOU MAKING ANY ADDITIONAL RECOMMENDATIONS?

2 A. Yes, my testimony includes recommendations on: (1) expanding the role of the
3 independent auction monitor to certify DLC's Request for Proposal ("RFP")
4 processes as resource-neutral, non-discriminatory and competitive; and (2) adopting
5 annual, rather than semiannual, reconciliation of any over- or under-collection of
6 actual revenues against actual costs for the residential class. I also make multiple
7 recommendations regarding DLC's EV-TOU proposal, and the Company's stated
8 intent to enter into a PPA with a solar project.

9 **II. SUMMARY OF THE COMPANY'S PROPOSED DSP IX**

10 Q. HAVE YOU REVIEWED THE COMPANY'S PETITION FOR APPROVAL
11 ("PETITION") IN THIS PROCEEDING?

12 A. Yes. I have reviewed the Company's Petition of the DSP IX. I have also reviewed
13 the Direct Testimony and exhibits submitted by DLC in support of its Petition.

14 Q. WHAT IS THE TIME PERIOD COVERED BY DLC'S PROPOSED DSP
15 IX?

16 A. DLC has proposed a 48-month plan to cover the period from June 1, 2021 through
17 May 31, 2025.

18 Q. HOW DOES THE COMPANY PROPOSE TO PROVIDE DEFAULT
19 SERVICE TO RESIDENTIAL CUSTOMERS DURING THE JUNE 1, 2021
20 THROUGH MAY 31, 2025 PLAN PERIOD?

21 A. DLC proposes to use a competitive RFP process to acquire a series of FPPR contracts
22 to provide generation service for the residential default service load. The Company's
23 lighting load is included with the residential load as a matter of practicality because
24 the lighting load is too small to effectively allow the Company to solicit default

1 service power supply for that class on a stand-alone basis. My references to the
2 “residential class” implicitly include the lighting class.

3 Q. PLEASE BRIEFLY DESCRIBE DLC’S PROPOSED PLAN AS IT
4 RELATES TO RESIDENTIAL CUSTOMERS.

5 A. Residential customers are grouped with lighting customers under DLC’s DSP IX.
6 Power supply will be provided through competitively procured, laddered, FPFR
7 contracts. Half of these FPFR contracts will have a duration of 12 months and half
8 will have a duration of 24 months. The FPFR contracts will be procured through
9 RFPs every six months. The Plan proposes that solicitations be conducted in March
10 and September in each of the four years covered by the proposed Plan. According to
11 the proposed procurement schedule, the procurements will be made two to three
12 months prior to the commencement of delivery periods. The proposed procurement
13 schedule will result in contracts covering a portion of the load extending past the end
14 of the proposed Plan period (May 31, 2025). The laddering proposed by DLC results
15 in 50 percent of the portfolio consisting of the 12-month FPFR contracts being
16 replaced every six months and 25 percent of the 24-month FPFR contracts being
17 replaced every six months.

18 Q. PLEASE EXPLAIN HOW DLC WOULD MEET ITS RESIDENTIAL
19 DEFAULT SERVICE OBLIGATION USING FPFR CONTRACTS.

20 A. Using an RFP procurement process, DLC would solicit wholesale supply bids to
21 supply load “tranches,” each under a fixed-price contract. A tranche is a fixed
22 percentage of the total residential and lighting default service load. DLC will split the
23 residential and lighting default service load into 48 equal tranches, each representing
24 slightly over 2 percent of the total residential and lighting class default service load in
25 each hour (DLC Statement No. 2, p. 8). The suppliers would bid a dollar-per-

1 megawatt-hour (“MWh”) price to supply all generation products required to serve
2 load – capacity, energy, ancillary services, and required alternative energy credits.
3 The contract price would be fixed for the 12- or 24-month contract period associated
4 with the particular FPFR. Over the course of the one- or two-year contract period, as
5 proposed by DLC, load responsibility measured on a megawatt (“MW”) and MWh
6 basis can change substantially from initial expectations due to factors such as
7 customer migration to competitive suppliers, migration back to default service from
8 an Electric Generation Supplier (“EGS”), growth (or decline) in the number of
9 residential customers, and weather conditions. Under DLC’s proposed approach,
10 wholesale suppliers are exposed to the volumetric risk of uncertain load responsibility
11 while DLC and its residential default service customers are insulated from this risk.

12 Q. HOW OFTEN WOULD RESIDENTIAL RATES CHANGE UNDER DLC’S
13 DEFAULT SERVICE PROPOSAL?

14 A. Residential rates would change twice per year, on June 1 and December 1 (DLC
15 Statement No. 2, p. 8). This is the same rate change schedule as under DLC’s current
16 Default Service Plan (DSP VIII).

17 Q. HOW OFTEN WOULD DLC CHANGE ITS REVENUE
18 RECONCILIATION RATE?

19 A. Revenue/cost reconciliation, which is anticipated to be small given the nature of the
20 supply product portfolio proposed by the Company to meet its residential default
21 service requirements, would be calculated every six months (as is the case under the
22 current plan).
23

1 reasoning for doing so. The use of overhanging FPFs extend the price stability
2 benefits of DLC's proposed DSP IX into the beginning part of the Company's
3 subsequent default service plan period.

4 Q. IS DLC'S PROPOSED FPF CONTRACTS PROCUREMENT METHOD
5 FOR RESIDENTIAL DEFAULT SERVICE CUSTOMERS ACCEPTABLE?

6 A. Yes, it is. DLC is proposing to employ a sealed-bid RFP approach to procure FPF
7 contracts for residential default service loads where each accepted offer is paid its bid
8 price. It is one of the standard procurement methods in the electricity industry.
9 Furthermore, DLC has relied on an RFP approach in the past and, to my knowledge,
10 has not encountered any adverse consequences that would suggest that an alternative
11 approach should be considered.

12 Q. IS DLC'S PROCUREMENT SCHEDULE ADEQUATE REGARDING THE
13 RESIDENTIAL CLASS FPF CONTRACTS?

14 A. I find DLC's proposed procurement schedule adequate for two reasons. First, the
15 Company proposes to acquire the FPFs two to three months before the start of the
16 delivery period of each product. This allows sufficient time to make changes to the
17 solicitation and issue a new RFP, if necessary, in the event that a solicitation is
18 unsuccessful (DLC does not receive a sufficient number of offers, the bids are
19 deemed uncompetitive or too high by the independent auction monitor or by the
20 Commission, etc.) On the other hand, two to three months is not so long as to entail
21 the incurrence of excessive price risk by wholesale suppliers. Second, DLC proposes
22 to procure the FPF contracts in March and in September of each year. These
23 months are outside of PJM's typical spot market price volatility periods, which are
24 the mid-summer and mid-winter months. It is reasonable to avoid periods of market
25 price volatility when making wholesale purchases.

1 **B. Independent Auction Monitor**

2 Q. PLEASE SUMMARIZE THE PJM CAPACITY MARKET MINIMUM
3 OFFER PRICE RULE PROCEEDING AT THE FEDERAL ENERGY
4 REGULATORY COMMISSION (“FERC”) AS IT RELATES TO STATE
5 DEFAULT SERVICE PROCUREMENTS,

6 A. The FERC ordered an overhaul of PJM’s capacity market auctions (also referred to in
7 the industry as Reliability Pricing Model, Base Residual Auctions, and Incremental
8 Auctions) to eliminate the effects of state subsidies to certain resources in PJM’s
9 capacity auctions. The FERC included payments made to suppliers in connection
10 with state-ordered default service auctions in the definition of “state subsidy.” In its
11 *Second Compliance Filing Concerning Application of the Minimum Offer Price Rule*
12 submitted to the FERC on June 1, 2020 (“June 1 filing” in FERC Docket No. EL18-
13 178 (Consolidated)), PJM proposed tariff language that exempts state default service
14 auctions from the definition of state subsidy and the application of the Minimum
15 Offer Price Rule (“MOPR”) to resources associated with winning bidders in those
16 auctions if such auctions meet certain criteria.

17 Q. WHAT ARE THE CRITERIA THAT PJM PROPOSED IN ITS JUNE 1
18 FILING TO DEEM STATE DEFAULT SERVICE PROCUREMENTS
19 EXEMPT FROM THE DEFINITION OF STATE SUBSIDY?

20 A. In its June 1 filing, PJM proposed to deem a state default service auction (such as
21 DLC’s RFPs for the procurement of wholesale supply contracts for their default
22 service customers) “competitive and resource-neutral” and thus exempt from the
23 definition of state subsidy if four conditions are met. First, the state default service
24 auction must be subject to oversight by a consultant or manager, independent of the
25 Market Participants, who certifies that the auction was conducted through a

1 non-discriminatory and competitive bidding process. Second, the default service
2 auction must not place any conditions based on the ownership, location, affiliation,
3 fuel type, technology, or emissions, of any resources or supply. Third, the default
4 service auction must not result in any contracts between the Entity Providing Supply
5 Services to Default Retail Service Provider and the electric distribution company that
6 imposes any conditions that would require any upstream bilateral transactions to be
7 sourced from any specific Capacity Resource or resource type in order to satisfy the
8 retail supply obligations. Fourth, retail customers must have the option to elect a
9 competitive retail supplier and effectively by-pass any supply charges that are a result
10 of the state default service auction awards. (June 1 filing, p. 20-21.)

11 Q. WHAT ARE THE CONSEQUENCES IF A STATE DEFAULT SERVICE
12 AUCTION MEETS ONLY SOME, BUT NOT ALL, OF THESE FOUR
13 REQUIREMENTS?

14 A. The capacity resources owned by entities awarded state default service contracts
15 (such as the FPR products to be solicited by DLC), their subsidiaries and affiliates,
16 and the counterparties with which they enter into wholesale capacity or energy
17 transactions fall under the definition of state subsidy. The owners of such capacity
18 resources are required to report the revenues from state default service auctions to
19 PJM, and PJM includes these revenues in the resources' minimum offer price in
20 PJM's capacity auctions. A high minimum offer price makes it more difficult for a
21 resource to clear in PJM's capacity auctions and receive capacity market revenues.
22 Capacity resource owners, and their subsidiaries and affiliates, would likely choose
23 not to participate in a default supply procurement that is not deemed competitive and
24 resource-neutral. Furthermore, wholesale counterparties associated with capacity
25 resource ownership may also shy away from transacting with the entities awarded

1 such state default service contracts, making it costly or perhaps outright impossible
2 for bidders in such state default service solicitations to hedge their price risks. As a
3 cumulative effect of these possibilities, state default service auctions that are not
4 deemed competitive and resource-neutral may not attract any bidders.

5 Q. DOES DSP IX AS PROPOSED BY DLC MEET THESE FOUR CRITERIA?

6 A. DLC's DSP IX, as proposed, meets the last three criteria, but not necessarily the first
7 requirement. While DLC proposes to engage an independent auction monitor to
8 monitor and conduct the competitive solicitations, the independent auction monitor's
9 role appears to be limited to qualifying bidders, conducting bidder information
10 sessions, receiving and evaluating all bids, determining winning bidders, and
11 reporting to the Commission (DLC Statement No. 2, p. 14). DLC's proposed role for
12 the independent auction monitor does not include certifying that the procurement
13 process is designed and conducted in accordance with a resource-neutral,
14 non-discriminatory and competitive bidding process.

15 Q. WHAT IS YOUR RECOMMENDATION REGARDING THE ROLE OF
16 THE INDEPENDENT AUCTION MONITOR?

17 A. I recommend that the role of the independent auction monitor be expanded to include
18 certifying that the solicitations are conducted through a resource-neutral,
19 non-discriminatory and competitive bidding process; and that DLC's RFPs meet all
20 requirements for an exemption from the definition of state subsidy. I also recommend
21 that the responsibilities of the independent auction monitor include conveying its
22 conclusions (to certify or not to certify the process as resource-neutral,
23 non-discriminatory and competitive) to PJM, to PJM's Independent Market Monitor,
24 and to FERC, as needed.

1 Q. DID FERC APPROVE PJM'S PROPOSAL IN THE JUNE 1 FILING
2 REGARDING THE DEFINITION OF STATE SUBSIDY AS IT RELATES
3 TO STATE DEFAULT SERVICE AUCTIONS?

4 A. FERC did not rule on PJM's June 1 filing to date. Given the fact that the FERC may
5 or may not rule on PJM's proposal by the time the Commission rules on the
6 Company's DSP IX, it is prudent to expand the scope of the independent auction
7 monitor's duties and responsibilities to include certifying DLC's RFP processes as
8 resource-neutral, non-discriminatory and competitive in DSP IX.

9 C. **EV-TOU Pilot Program**

10 Q. PLEASE DESCRIBE THE EV-TOU PILOT PROGRAM PROPOSED BY
11 THE COMPANY.

12 A. The Company is proposing an EV-TOU for residential, small C&I and medium C&I
13 customers, available exclusively to those customers who own or lease a plug-in
14 electric battery vehicle or a plug-in hybrid electric vehicle (collectively "EV") or
15 offer charging to employees or visitors. DLC proposes to supply EV-TOU loads
16 from the same wholesale supply products as the rest of the default service customers
17 in the corresponding customer class. DLC is proposing three distinct time periods for
18 EV-TOU supply rates. The peak period is between 1 pm and 9 pm; off-peak period is
19 between 11 pm and 6 am; and the shoulder period is the rest of the hours (6 am to 1
20 pm, and 9 pm to 11 pm). These TOU hours are valid for every day of the year,
21 whether it is a weekday, Saturday, Sunday or a holiday.

22 Q. HOW ARE RESIDENTIAL EV-TOU SUPPLY RATES AND SUPPLY
23 RATE FACTORS PROPOSED BY DLC TO BE DERIVED FOR EACH
24 TOU PERIOD?

1 A. The EV-TOU supply rate for each TOU period is equal to the default service supply
2 rate (for non-EV-TOU customers) times the supply rate factor for that TOU period.
3 The supply rate factors for the first year of the program (June 1, 2021 through May
4 31, 2022) are calculated based on the share of total (energy plus capacity) cost of
5 serving the residential default service load in each TOU period, based on residential
6 default service customers' historical capacity obligations; residential default service
7 customers' historical hourly loads; PJM capacity price for the 2021/2022 Delivery
8 Year ("DY") (June 1, 2021 through May 31, 2022); and hourly load-weighted
9 locational marginal prices ("LMP") for the Calendar Years from 2016 through 2019.

10 Q. DOES THE COMPANY PROPOSE TO UPDATE THE SUPPLY RATE
11 FACTORS PERIODICALLY, OR USE THE SAME SUPPLY RATE
12 FACTORS THROUGHOUT THE TERM OF THE DSP IX?

13 A. The Company's Petition appears to be silent on that issue. As customer class
14 capacity obligations, loads, PJM LMPs, and capacity prices evolve, it would make
15 sense to reset the supply rate factors annually based on a rolling average. Otherwise,
16 the supply rate factors will become "stale" and they will cease to reflect relative
17 incremental costs of serving load in each TOU period.

18 Q. HOW DOES THE COMPANY PROPOSE TO RECOVER AND
19 ALLOCATE THE COSTS IT INCURS FOR THE IMPLEMENTATION OF
20 EV-TOU?

21 A. DLC proposes to recover incremental implementation costs of EV-TOU from default
22 service customers as a combination of direct assignment to customer classes (for costs
23 readily attributable to a customer class) and allocation to default service classes
24 eligible to participate in EV-TOU in proportion to default service load of each
25 customer class (DLC Statement No. 4, p. 20).

1 Q. DOES THE COMPANY PROVIDE EV-TOU COST ESTIMATES AND
2 PROGRAM COST CATEGORIES?

3 A. DLC witness Ms. Scholl estimates EV-TOU implementation costs to total \$227,900
4 over the four-year term of the proposed DSP IX, \$92,600 of which will be incurred in
5 the first year of the Plan. Ms. Scholl enumerates EV-TOU cost categories as
6 webpage, online bill estimate tool, bill insert, educational email, digital advertising,
7 print collateral and event promotion, and EV TOU monthly email set-up (DLC
8 Exhibit KMS-2).

9 Q. DOES THE COMPANY PROVIDE AN ALLOCATION OF EV-TOU
10 COSTS TO INDIVIDUAL DEFAULT SERVICE CUSTOMER CLASSES?

11 A. DLC witness Mr. Ogden provides the allocation of the first-year program cost of
12 \$92,600 in DLC Exhibit DBO-5, line 2. Mr. Ogden allocates \$89,333 to residential
13 and lighting default service class, and \$1,333 each to small C&I and medium C&I
14 default service classes. Mr. Ogden labels the allocation mechanism as “direct
15 assignment.” Neither Mr. Ogden nor Ms. Scholl (or any other DLC witness) explains
16 how total program cost or each program category cost was allocated/assigned to
17 individual default service customer classes. Allocating more than 96 percent of the
18 total first-year program cost to the residential and lighting default service customer
19 class requires a detailed explanation by cost category from the Company.

20 Q. ARE YOU MAKING ANY RECOMMENDATIONS RELATED TO DLC’S
21 PROPOSED EV-TOU?

22 A. Yes, I have three recommendations. First, DLC should recalculate TOU rate factors
23 each year based on rolling four-year average LMPs, customer class loads, and PJM
24 capacity prices applicable to the DY, to prevent the rate factors from getting “stale.”
25 Second, DLC should clearly state and justify any direct assignment of EV-TOU

1 implementation costs to customer classes, and allocate non-direct assignment costs to
2 customer classes on the basis of customer class default service loads, as measured in
3 total kilowatt-hours (“kWh”). Third, DLC should present a detailed report on the
4 performance of the EV-TOU in four years as part of its petition for the approval of its
5 subsequent default service plan, and propose revisions to the design of the program
6 based on its experience with EV-TOU as well as the experiences of other
7 Pennsylvania utilities, and utilities nationwide with comparable programs. Potential
8 improvements to the program may include redefining the TOU periods, and revising
9 the DLC method used to calculate the supply rate factors.

10 **D. Reconciliation Mechanism**

11 Q. PLEASE EXPLAIN DLC’S PROPOSED MECHANISM TO RECONCILE
12 ACTUAL DEFAULT SERVICE COSTS AND DEFAULT SERVICE
13 REVENUES FOR THE RESIDENTIAL CLASS.

14 A. DLC is proposing a six-month reconciliation mechanism, where cost recovery of
15 over- or under-collections occurring over a six-month period would be collected over
16 the subsequent six-month period, with a lag of four months.

17 Q. DO YOU EXPECT THE “E FACTOR RATE” TO BE HIGH FOR
18 RESIDENTIAL DEFAULT SERVICE CUSTOMERS?

19 A. It is anticipated that the differences between revenues and costs would be small, as
20 the Company is proposing a residential default service portfolio consisting
21 exclusively of FPPR contracts. Under those circumstances, the E Factor Rate, which
22 is the (positive or negative) amount subject to reconciliation (\$) divided by the
23 projected default service loads (MWh), will be small. However, if the Company ever
24 needs to invoke its proposed contingency plan (in the event of supplier defaults or

1 inability to award the required number of PFR contracts), then a portion of the
2 residential default supply load may need to be provided through the PJM spot market,
3 which in turn would result in higher amounts subject to reconciliation and a higher E
4 Factor Rate.

5 Q. ARE THERE OTHER ELEMENTS IN DLC'S PROPOSED DSP IX THAT
6 WILL INCREASE THE RECONCILIATION AMOUNTS?

7 A. Yes, there are three elements that I expect to contribute to the volatility of the E
8 Factor Rates. First, DLC proposes to supply residential EV-TOU loads from the
9 same wholesale supply products as the rest of the residential and lighting default
10 service customers, which will generate a mismatch between energy revenue collected
11 (using time-differentiated rates) and the costs recovered (which compensate the
12 wholesale suppliers at fixed, per-kWh rates). Second, DLC proposes to sell the
13 energy (and perhaps ancillary services as well) it plans to acquire as part of the long-
14 term solar PPA into the PJM spot market (rather than netting this energy from default
15 service loads). The difference between the projected and realized solar energy
16 revenues will be included in the amounts subject to reconciliation. Third, DLC
17 proposes to recover the cash-out payment for net metering customers through the
18 reconciliation mechanism as part of the E Factor Rate. Therefore, these proposed
19 DSP IX elements, all of which are new in DSP IX relative to DSP VIII, will
20 contribute to the magnitude and volatility of the E Factor Rates.

21 Q. DO YOU AGREE WITH DLC'S PROPOSAL TO RECOVER CASH-OUT
22 PAYMENTS FOR RESIDENTIAL NET METERING CUSTOMERS
23 THROUGH THE RESIDENTIAL E FACTOR RATES?

24 A. I am not opposing the Company's proposal to recover cash-out payments for
25 residential net metering customers through the residential E Factor Rates at this time,

1 since these cash-out sums are relatively small for the time being. However, the issue
2 may need to be revisited if and when these payments reach more significant amounts,
3 with an eye toward rate stability for residential default service customers and ensuring
4 equitable allocation of these costs. While I do not take issue with the Company's
5 right to recover any legitimate costs, there may be better mechanisms through which
6 DLC recovers them.

7 Q. ARE YOU RECOMMENDING A DIFFERENT RECONCILIATION
8 MECHANISM?

9 A. Yes, I recommend a six-month reconciliation mechanism, with cost recovery of
10 over- or under-collections occurring over the subsequent 12-month period. This
11 would provide additional stability in rates for residential default service customers,
12 and also permit the default service rates to be reflective of market prices since the
13 reconciliation adjustment can be expected to be smaller than if amortization of the
14 amounts were made over a six-month period. For the default service rates to be
15 market-reflective as the Commission prefers, the rate components that are
16 independent of wholesale market prices should be as small as possible in either
17 direction. Since the reconciliation adjustment reflects past market outcomes rather
18 than prevailing market conditions, amortizing the reconciliation adjustment over 12
19 months will result in more market-reflective residential default service rates
20 compared to a six-month amortization.

21 E. **Long-term Solar PPA Plan**

22 Q. PLEASE DESCRIBE THE COMPANY'S LONG-TERM SOLAR PPA
23 PLAN.

1 A. The Company is in the process of evaluating the benefits of executing long-term
2 PPAs to support development of utility-scale solar energy projects in Pennsylvania,
3 with a preference for projects within the DLC service territory. DLC has not
4 submitted a detailed plan to procure solar power through long-term PPAs, but it has
5 presented some basic concepts that would form the basis of a detailed plan to be
6 developed by DLC. In aggregate, the projects are proposed to be limited to not more
7 than 7 MW. DLC anticipates buying the energy and alternative energy credits from
8 the solar project(s) as part of the PPA(s), with the possibility that the Company would
9 also purchase capacity and ancillary services attributes of the project(s). DLC
10 proposes to use the alternative energy credits resulting from the project(s) to satisfy,
11 in part, the solar requirements of the Company's default service loads. DLC plans to
12 monetize the energy by selling it in PJM's real-time energy market, rather than
13 netting this energy from default service loads. Under DLC's proposal, the cost of the
14 PPA(s) and all revenues earned by DLC from these projects will accrue to all default
15 service customers at the same weighting as each customer class's solar alternative
16 energy credits obligation share (DLC Statement No. 1, pp. 13-17).

17 Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING DLC'S
18 PROPOSED SOLAR PPA?

19 A. Yes, I have two recommendations. First, DLC should demonstrate that any solar PPA
20 that DLC will propose should be at least revenue-neutral over the term of the contract
21 (i.e. sum of the projected revenues from all attributes should not be lower than PPA
22 payments made to the developer on a discounted cash flow basis) based on forward
23 price projections. As part of its solar PPA filing, DLC should provide price
24 projections for each attribute (energy, alternative energy credits, capacity, ancillary
25 services) of the solar PPA(s) over the term of the contract(s) and demonstrate that the

1 projects are either revenue-neutral or revenue-positive for the default service
2 customers. Second, DLC proposes to assign the costs and benefits of the solar
3 PPA(s) to all default service loads at the same weighting as each customer class's
4 solar alternative energy credits obligation share. In the solar PPA plan that it had
5 proposed as part of DSP VIII, the Company had proposed to assign all costs and
6 benefits of the solar contract(s) exclusively to the residential default service
7 customers. I find the Company's proposed assignment method in DSP IX more
8 equitable, and recommend that DLC follow through with its proposal to assign costs
9 and benefits to all default service customer classes, rather than to a single customer
10 class.

11 Q. IF NONE OF THE SOLAR PPA OFFERS THE COMPANY RECEIVES
12 ARE PROJECTED TO BE REVENUE-NEUTRAL OR
13 REVENUE-POSITIVE OVER THE LIFE OF THE CONTRACT(S), DOES
14 DLC HAVE OTHER OPTIONS TO INCLUDE A LONG-TERM PRODUCT
15 IN ITS "PRUDENT MIX?"

16 A. Yes, it has. DLC can buy an energy block with a term of more than four years, such
17 as a five-year all-hours block for delivery at the DLC Zone or the Western Hub. The
18 Company can also acquire, via a solicitation, alternative energy credits (solar or Tier
19 I) for a term of more than four years.

20 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

21 A. Yes.

APPENDIX A

SUMMARY OF QUALIFICATIONS

for

SERHAN OGUR, Ph.D.

SERHAN OGUR

Dr. Ogur is a Principal of Exeter Associates, Inc. with over 18 years of experience in the energy industry specializing in organized wholesale (Regional Transmission Organization/Independent System Operator) and retail electricity markets. Dr. Ogur's diverse background comprises energy management and consulting; analysis, design, and reporting of RTO electricity markets and products; and state and federal regulation of electric utilities.

Dr. Ogur's coursework in graduate school focused on Microeconomic Theory, Game Theory, and Industrial Organization. His doctoral dissertation investigates imperfect competition in deregulated wholesale electricity markets and oligopolistic competition between private and public generators.

Education

B.A. (Economics) – Bogazici University, Istanbul, Turkey, 1996

Ph.D. (Economics) – Northwestern University, Evanston, IL, 2007

Previous Employment

2014-2015	Senior System Operator Fellon-McCord & Associates, LLC Louisville, KY
2005-2014	Senior Economist PJM Interconnection, LLC Audubon, PA
2001-2005	Economic Analyst Illinois Commerce Commission Springfield, IL

Professional Experience

Dr. Ogur's work at Exeter includes analysis of electricity supply contracts; utility rates and tariffs; energy markets and prices; power procurement; default electric service design; project evaluation; demand response opportunities; congestion hedging strategies; and price forecasting.

Prior to joining Exeter, Dr. Ogur's responsibilities at Fellon-McCord encompassed overseeing and performing the daily tasks of the "24/7" wholesale electricity desk, including all aspects of scheduling, managing, and monitoring direct market participant load and generation assets (mostly in ISO/RTO markets) as well as their settlements and custom reporting. He was also in charge of developing strategies and making recommendations, through analytical, financial, and market research, for longer-term management of clients' load obligations and generation assets such as Auction Revenue Rights (ARR) nominations; participation in energy, ancillary services,

and capacity markets; load forecasting; energy, basis, and capacity price forecasting; hedging; and peak load management. Dr. Ogur also served as the company's lead analyst in various special consulting projects.

In PJM Interconnection's Market Strategy and Market Analysis departments, Dr. Ogur was responsible for analyzing and reporting on all PJM-administered electricity market products, including day-ahead and real-time energy, operating reserve, regulation, synchronized reserve, virtual transactions, financial transmission rights, capacity, demand response, energy efficiency, and renewables. He was part of the team that developed the protocols and business rules for participation of energy efficiency in PJM markets as well as a lead reviewer for energy efficiency plans and post-installation measurement and verification (M&V) reports for PJM's capacity market auctions. He also has training and experience in PJM's stakeholder management process.

Dr. Ogur's responsibilities at the Illinois Commerce Commission (ICC) included monitoring all Illinois-related developments under federal jurisdiction, mostly Federal Energy Regulatory Commission (FERC) filings and rulings concerning major Illinois electric public utilities. In addition, Dr. Ogur reviewed all actions concerning Illinois public utilities at the FERC level (applications to join RTOs, market-based rate authority filings, merger applications, transmission rate cases, etc.), and developed positions and official comments for the consideration of the ICC to file in the related FERC dockets. Dr. Ogur also filed written testimony and served as staff witness (including standing cross-examination) in the ICC dockets establishing auction-based competitive wholesale energy procurement mechanisms for major Illinois electric public utilities.

Expert Testimony

Before the Pennsylvania Public Utility Commission, Docket Nos. P-2020-3019383 and P-2020-3019384, Citizens' Electric Company of Lewisburg, PA and Wellsboro Electric Company, 2020, on behalf of the Pennsylvania Office of Consumer Advocate. Testimony addressed default service issues.

Before the Pennsylvania Public Utility Commission, Docket No. P-2016-2534980, PECO Energy Company, 2016, on behalf of the Pennsylvania Office of Consumer Advocate. Testimony addressed default service issues.

Before the Illinois Commerce Commission, Docket No. 05-0159, Commonwealth Edison Company, 2005, on behalf of the Staff of Illinois Commerce Commission. Testimony addressed default service design and competitive procurement issues.

Before the Illinois Commerce Commission, Docket Nos. 05-0160, 05-0161, and 05-0162 (Consolidated), Central Illinois Light Company d/b/a AmerenCILCO, 2005, on behalf of the Staff of Illinois Commerce Commission. Testimony addressed default service design and competitive procurement issues.

Before the Illinois Commerce Commission, Docket No. 02-0428, Central Illinois Light Company and Ameren Corporation, 2002, on behalf of the Staff of Illinois Commerce Commission. Testimony addressed competition issues in a utility merger case.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of Default Service Plan for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

VERIFICATION

I, Serhan Ogur, hereby state that the facts set forth in my Direct Testimony, OCA Statement 1, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: July 17, 2020
*292284

Signature: _____

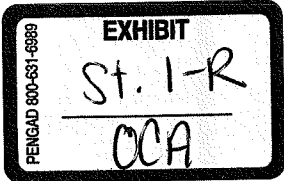
Serhan Ogur

Consultant Address: Exeter Associates, Inc.
10480 Little Patuxent Parkway
Suite 300
Columbia, MD 21044-2690

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PETITION OF DUQUESNE LIGHT)
COMPANY FOR APPROVAL OF DEFAULT) DOCKET NO.
SERVICE PLAN FOR THE PERIOD) P-2020-3019522
JUNE 1, 2021 THROUGH MAY 31, 2025)

REBUTTAL TESTIMONY
OF
SERHAN OGUR



ON BEHALF OF THE
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

AUGUST 14, 2020

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Serhan Ogur. I am a Principal and Senior Economist at Exeter Associates, Inc. Our offices are located at 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland, 21044.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN THIS PROCEEDING?

A. Yes. I submitted Direct Testimony in this proceeding on July 17, 2020 on behalf of the Pennsylvania Office of Consumer Advocate (“OCA”).

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. My Rebuttal Testimony addresses certain issues raised by other intervenors in this proceeding. The issues that I address include: (1) concerns regarding how aspects of Duquesne Light Company (“DLC” or the “Company”)'s proposed Default Service Plan (“DSP”) IX relate to PJM’s second compliance filing (which I referred to as the “June 1 filing” in my Direct Testimony) with the Federal Energy Regulatory Commission (“FERC”) regarding PJM’s Minimum Offer Price Rule (“MOPR”); (2) the rate design in the Electric Vehicle Time of Use Pilot Program (“EV-TOU”) proposed by DLC; and (3) a forthcoming DLC proposal to enter into a long-term Purchase Power Agreement (“PPA”) for energy and alternative energy credits (and possibly capacity and ancillary services as well) to be supplied by a utility-scale solar facility.

1 **II. ISSUES RELATED TO PJM’S MINIMUM OFFER PRICE RULE**

2 Q. HAVE YOU ADDRESSED THIS ISSUE IN YOUR DIRECT
3 TESTIMONY?

4 A. Yes, I have addressed this issue in my Direct Testimony in the context of the
5 independent auction monitor.¹

6 Q. TO WHICH WITNESSES ARE YOU RESPONDING ON THIS ISSUE?

7 A. I am responding to the comments of Christopher H. Kallaher, who submitted Direct
8 Testimony on behalf of the Interstate Gas Supply, Inc., Shipley Choice LLC, NRG
9 Energy, Inc., Vistra Energy Corp., Engie Resources LLC, WGL Energy Services,
10 Inc., and Direct Energy Services, LLL (“EGS Parties”).²

11 Q. PLEASE DESCRIBE THE POSITION OF MR. KALLAHER.

12 A. Mr. Kallaher recommends that the Commission direct DLC to make a supplemental
13 filing to describe how its proposed DSP IX meets PJM’s requirements for being the
14 “result of a non-discriminatory and competitive bidding process,” and that the DSP
15 not be approved without such a finding by the Commission.

16 Q. WHAT IS THE BASIS FOR MR. KALLAHER’S POSITION ON THIS
17 ISSUE?

18 A. Mr. Kallaher cites two reasons for why DLC’s proposed DSP IX fails to meet the
19 requirements in PJM’s second compliance filing. First, Mr. Kallaher posits that the
20 proposed DSP IX deprives Customer Assistance Program (“CAP”) customers of the
21 ability to bypass the default service supply costs by holding them captive to the
22 default rate because of the requirement that an EGS must charge CAP customers a
23 rate at or below the applicable residential Price-to-Compare (“PTC”) through the

¹ OCA Statement No. 1, pp. 9-12.

² EGS Parties Statement No. 1.

1 duration of the contract. Second, Mr. Kallaher argues that the pricing of default
2 service does not establish “market-based compensation” for that product because
3 DLC makes “little attempt to include retail cost components that the EGS competitors
4 of default service incur when providing retail electric service in the Duquesne service
5 territory.”³ For these reasons, Mr. Kallaher contends, the wholesale contracts between
6 DLC and its suppliers of fixed-price full-requirements (“FPFR”) load-following
7 contracts will be considered “state subsidy” and thus will be subject to the MOPR.

8 Q. DO YOU AGREE WITH MR. KALLAHER’S ASSESSMENTS?

9 A. I disagree with both of Mr. Kallaher’s assessments. First, Mr. Kallaher’s claim that
10 the restrictions imposed on the participation of CAP customers in customer choice
11 violates PJM’s proposed requirement for avoidability of default service supply
12 charges is without merit. Any residential default service customer is eligible to switch
13 from default service to generation service from an EGS, even if the supply rate
14 charged by the EGS is above the PTC. However, those residential customers
15 participating in the CAP would need to forgo participation in the CAP to be able to
16 receive generation service from an EGS at a rate above the PTC.

17 Second, Mr. Kallaher’s assertion that the default service rate, that is, the PTC,
18 is not market-based is incorrect. Supply is procured through a competitive Request
19 for Proposal (“RFP”) process overseen by an independent monitor. Regarding his
20 claim that DLC makes “little attempt to include retail cost components that the EGS
21 competitors of default service incur when providing retail electric service in the
22 Duquesne service territory,” the PTC rate should and does reflect the costs incurred to
23 provide that service, not the costs that a competitive supplier may incur to provide a
24 competitive service. The Commission has supported this position, stating: “The PTC

³ EGS Parties Statement No. 1, pp. 12-14.

1 does not determine the level of costs that would equal an EGS's costs for like
2 services."⁴ As I stated in my Direct Testimony, I believe that DSP IX, as proposed by
3 DLC, meets all requirements in PJM's second compliance filing, other than
4 certification by an independent manager or consultant that the auction was conducted
5 through a non-discriminatory and competitive bidding process. In other words, the
6 process by which the Company procures FPPR contracts is non-discriminatory and
7 competitive in my opinion; however, DLC needs to ensure that this fact is certified by
8 an independent auction monitor.

9 Q. DO YOU AGREE WITH MR. KALLAHER THAT DLC SHOULD MAKE
10 A SUPPLEMENTAL FILING DEMONSTRATING COMPLIANCE WITH
11 THE REQUIREMENTS IN PJM'S SECOND COMPLIANCE FILING?

12 A. No, I do not. FERC has not yet ruled on PJM's second compliance filing or issued a
13 final order in the MOPR proceeding. It is premature to ask the Company to
14 demonstrate compliance with a set of requirements that are not yet part of the PJM
15 tariff.

16 **III. DLC's EV-TOU RATE DESIGN**

17 Q. WHAT HAS DLC PROPOSED REGARDING THE DESIGN OF THE EV-
18 TOU RATES?

19 A. DLC is proposing three distinct time periods for EV-TOU supply rates. For each day
20 of the year, the peak period is between 1 pm and 9 pm; the off-peak period is between
21 11 pm and 6 am; and the shoulder period is the rest of the hours (6 am to 1 pm, and 9
22 pm to 11 pm). The EV-TOU supply rate for each TOU period is equal to the default
23 service supply rate (for non-EV-TOU customers) times the supply rate factor for that

⁴ Docket Nos. R-2018-3000164, C-2018-3001112, C-2018-3001043, and C-2018-3001471, Opinion and Order, December 20, 2018, p. 68.

1 TOU period. The supply rate factors for the first year of the program (June 1, 2021
2 through May 31, 2022) are calculated based on the share of total (energy plus
3 capacity) cost of serving the residential default service load in each TOU period,
4 based on residential default service customers' historical capacity obligations;
5 residential default service customers' historical hourly loads; PJM capacity price for
6 the 2021/2022 Delivery Year ("DY") (June 1, 2021 through May 31, 2022); and
7 hourly load-weighted locational marginal prices ("LMP") for the Calendar Years
8 from 2016 through 2019. The supply rate factors will be updated annually by the
9 Company. The ratio of peak to off-peak rate is approximately 3.5 for the first year of
10 the EV-TOU pilot program.

11 Q. DID YOU ADDRESS DLC'S PROPOSED EV-TOU PILOT PROGRAM IN
12 YOUR DIRECT TESTIMONY?

13 A. Yes. I did not oppose the proposal in my Direct Testimony. However, I recommended
14 that DLC reset the supply rate factors annually so that they continue to reflect relative
15 incremental costs of serving load in each TOU period.

16 Q. WHO ARE THE WITNESSES TO WHOM YOU ARE RESPONDING ON
17 THE ISSUE OF DLC'S PROPOSED EV-TOU PILOT PROGRAM?

18 A. I am responding to the Direct Testimony of Kathleen Harris, submitted on behalf of
19 the National Resources Defense Council ("NRDC").

20 Q. WHAT IS MS. HARRIS RECOMMENDING WITH REGARD TO THE
21 DETERMINATION OF SUPPLY RATE FACTORS?

22 A. Ms. Harris states: "For a more effective price signal, DLC could also design a rate
23 that has more variation—which will be less simple—but has a higher peak to off-peak
24 ratio. DLC should also look to best practices from other jurisdictions when
25 considering the appropriate and most successful price ratios, as well as the optimal

1 time periods for off-peak, shoulder, and peak rates. The larger the peak to off-peak
2 price ratio, the larger the price signal to encourage drivers to charge during off-peak
3 hours.”⁵

4 Q. DO YOU AGREE WITH MS. HARRIS’ RECOMMENDATION?

5 A. Supply rate factors should be determined to reflect the relative incremental costs of
6 serving load in each TOU period. Setting the peak to off-peak price ratio at an
7 arbitrarily high level leads to two undesirable outcomes. First, it sends inefficient
8 price signals to retail customers and incentivizes inefficient consumption patterns.
9 Second, since a higher peak to off-peak price ratio means a higher peak price
10 compared to a lower peak to off-peak price ratio, it unfairly raises the electricity costs
11 to customers who have less flexibility to shift usage from peak hours to off-peak
12 hours. It may even reduce customer participation in the EV-TOU rate schedule if
13 some customers worry that the EV-TOU rates may raise their electricity costs if they
14 are unable to shift enough usage from the peak period to the shoulder and off-peak
15 periods due to factors outside of their control such as heating or cooling load.

16 **IV. DLC’S LONG-TERM SOLAR PPA PLAN**

17 Q. PLEASE SUMMARIZE DLC’S LONG-TERM SOLAR PPA PLAN

18 A. The Company plans to file for the Commission’s approval of long-term solar PPAs
19 with utility-scale solar energy projects in Pennsylvania, for a term longer than four
20 years but less than 20 years. In aggregate, the projects are proposed to be limited to
21 not more than 7 megawatts (“MW”). DLC anticipates buying the energy and
22 alternative energy credits (“AECs”) from the solar project(s) as part of the PPA(s),
23 with the possibility that the Company would also purchase capacity and ancillary
24 services attributes of the project(s). DLC proposes to use the AECs resulting from the

⁵ NRDC Statement No. 1, p. 11.

1 project(s) to satisfy, in part, the solar requirements of the Company's default service
2 loads. DLC plans to monetize the energy by selling it in PJM's real-time energy
3 market, rather than netting this energy from default service loads.

4 Q. DID YOU RECOMMEND ANY CHANGES TO DLC'S LONG-TERM
5 SOLAR PPA PLAN?

6 A. No, I did not. However, I recommended that DLC demonstrate that any solar PPA
7 that the Company proposes be economic (i.e. at least revenue-neutral) over the term
8 of the contract (i.e. sum of the projected revenues from all attributes should not be
9 lower than PPA payments made to the developer on a discounted cash flow basis)
10 based on forward price projections.

11 Q. TO WHICH WITNESS ARE YOU RESPONDING TO REGARDING
12 TESTIMONY RELATED TO THE COMPANY'S LONG-TERM SOLAR
13 PPA PLAN?

14 A. I am responding to the Direct Testimony of EGS Parties' witness, Mr. Kallaher.

15 Q. PLEASE DESCRIBE THE POSITION OF MR. KALLAHER.

16 A. Mr. Kallaher recommends that DLC's long-term solar PPA plan be put on hold for
17 now. Instead, Mr. Kallaher suggests that the Commission direct DLC to conduct a
18 working group to study the state of solar development in the Company's service
19 territory. Mr. Kallaher also suggests that the Commission "monitor the legislative
20 session for action on community solar and, should such programs be enabled, to put
21 the Duquesne proposal for a solar PPA on hold until the next default service plan."⁶

22 Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF THE BASIS FOR
23 MR. KALLAHER'S OPPOSITION TO DLC'S LONG-TERM SOLAR PPA
24 PLAN AT THIS TIME.

⁶ EGS Parties Statement No. 1, p. 26.

1 A. Mr. Kallaher cites three reasons for opposing the Company's long-term solar PPA
2 plan. First, Mr. Kallaher claims that the opportunity to move to an alternative default
3 service provider may be hindered or foreclosed if DLC enters into contracts that
4 extend beyond May 31, 2025, the end date of the DSP IX period.⁷ Second, Mr.
5 Kallaher notes that the long-term contracts may turn out to be uneconomic over the
6 course of the delivery period relative to then-prevailing market prices.⁸ Third, Mr.
7 Kallaher argues that DLC's stated plan to enter into long-term solar PPAs may hinder
8 the development of the solar industry in Pennsylvania. Mr. Kallaher suggests that
9 solar projects currently under development may pass up current contracting
10 opportunities in order to contract with DLC in the future. Mr. Kallaher also posits that
11 a solar PPA that DLC executes will decrease the likelihood of passing a bill in the
12 Pennsylvania legislature allowing community solar projects to go forward.⁹

13 Q. DO YOU AGREE WITH MR KALLAHER'S REASONS TO OPPOSE
14 DLC'S LONG-TERM SOLAR PPA PLAN?

15 A. I disagree with all three reasons Mr. Kallaher cites for opposing the Company's long-
16 term solar PPA plan. First, any contractual obligations incurred by DLC by entering
17 into contracts that extend beyond the end date of DSP IX can be transferred to a new
18 default service provider if one were to be approved. In addition, Pennsylvania electric
19 distribution companies ("EDCs") as default service providers routinely enter into
20 FPFR power supply contracts (which are approved by the Commission) that extend
21 beyond the end date of the default service plan period to avoid a "hard stop" on
22 supply at the end of the period. Failure to enter into such "overhanging" contracts

⁷ *Id.*, p. 23, lines 19-21.

⁸ *Id.*, p. 24, lines 15-18.

⁹ *Id.*, p. 25, lines 5-11.

1 unnecessarily exposes residential customers to price shock risk at the start of a new
2 default service plan period.

3 Second, while it is certainly possible that long-term contracts may turn out to
4 be uneconomic over the course of the delivery period relative to then-prevailing
5 market prices, it is just as possible that the contracts turn out to be below market over
6 the course of the delivery period. What is relevant here is that the future market prices
7 for energy, solar AECs, or capacity are not known. Therefore, long-term solar PPAs
8 for energy and AECs, and possibly for capacity and ancillary services attributes as
9 well, operate as a hedge against large price increases during the term of the contract,
10 not necessarily as a means to secure the lowest possible price at any particular time.
11 In fact, the Commission supports this view by giving EDCs the flexibility to include
12 long-term products in their default service product portfolios.

13 Third, it is unreasonable to expect DLC's long-term solar PPA for 7
14 megawatts or less to have any negative impact on the long-term solar contracting
15 market in Pennsylvania. There are 269 solar projects in Pennsylvania in the PJM
16 generation interconnection queue (as of August 13, 2020), representing more than
17 9,000 megawatts (with a status of active, under construction, or engineering and
18 procurement).¹⁰ The capacity sought by DLC is barely a drop in the bucket relative to
19 the overall size of the solar projects in Pennsylvania waiting in PJM's generation
20 interconnection queue. Similarly, it is hard to imagine how a 7-MW utility-scale solar
21 PPA that DLC may execute would hinder the passage of a bill in the Pennsylvania
22 legislature that supports community solar projects. In fact, long-term contracts for
23 bundled energy and AECs are generally seen to support renewable energy project
24 development, not to impede it.

¹⁰ <https://www.pjm.com/planning/services-requests/interconnection-queues.aspx>

1 Q. DO YOU AGREE WITH MR. KALLAHER'S RECOMMENDATION TO
2 PUT DLC'S LONG-TERM SOLAR PPA PLAN ON HOLD FOR NOW?

3 A. No, I do not. I do not see any compelling reason why DLC's DSP IX proposal to
4 enter into long-term PPAs for bundled energy and AECs, and possibly capacity and
5 ancillary services as well, should not be accepted.

6 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

7 A. Yes, it does.

294060

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of Default Service Plan for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

VERIFICATION

I, Serhan Ogur, hereby state that the facts set forth in my Rebuttal Testimony, OCA Statement 1-R, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 14, 2020
*294049

Signature: _____

Serhan Ogur

Consultant Address: Exeter Associates, Inc.
10480 Little Patuxent Parkway
Suite 300
Columbia, MD 21044-2690

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PETITION OF DUQUESNE LIGHT)
COMPANY FOR APPROVAL OF DEFAULT) DOCKET NO.
SERVICE PLAN FOR THE PERIOD) P-2020-3019522
JUNE 1, 2021 THROUGH MAY 31, 2025)

SURREBUTTAL TESTIMONY
OF
SERHAN OGUR
ON BEHALF OF THE
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

AUGUST 28, 2020

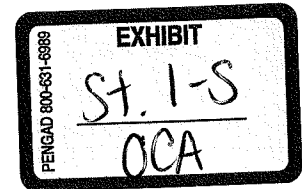


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1 **I. INTRODUCTION**

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A. My name is Serhan Ogur. I am a Principal and Senior Economist at Exeter Associates,
4 Inc. Our offices are located at 10480 Little Patuxent Parkway, Suite 300, Columbia,
5 Maryland, 21044.

6 Q. HAVE YOU PREVIOUSLY TESTIFIED IN THIS PROCEEDING?

7 A. Yes. I submitted Direct Testimony and Rebuttal Testimony in this proceeding on July
8 17, 2020 and August 14, 2020, respectively, on behalf of the Pennsylvania Office of
9 Consumer Advocate (“OCA”).

10 Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN
11 THIS PROCEEDING?

12 A. My Surrebuttal Testimony addresses certain issues raised by Duquesne Light Company
13 (“DLC” or the “Company”) in this proceeding. The issues that I address include: (1)
14 the structure of the Company’s proposed reconciliation adjustment; and (2) a
15 forthcoming DLC proposal to enter into a long-term Purchase Power Agreement
16 (“PPA”) for energy and alternative energy credits (and possibly capacity and ancillary
17 services as well) to be supplied by a utility-scale solar facility.

1 **II. RECONCILIATION MECHANISM**

2 Q. WHAT HAS DLC PROPOSED IN THIS CASE REGARDING THE
3 RECONCILIATION MECHANISM?

4 A. DLC has proposed a semi-annual reconciliation mechanism, where cost recovery of
5 over- or under-collections occurring over a six-month period would be collected over
6 the subsequent six-month period, with a lag of four months.

7 Q. DID YOU ADDRESS THIS ISSUE IN YOUR DIRECT AND REBUTTAL
8 TESTIMONIES?

9 A. Yes. In my Direct Testimony I recommended a “six-month/12-month” reconciliation
10 mechanism where cost recovery of over- or under-collections in a six-month period
11 would occur over the subsequent 12-month period, with a lag.

12 Q. TO WHOM ARE YOU RESPONDING ON THIS ISSUE IN YOUR
13 SURREBUTTAL TESTIMONY?

14 A. I am responding to the Rebuttal Testimony of DLC witness Mr. David Ogden. Mr.
15 Ogden disagrees with my six-month/12-month reconciliation mechanism proposal. He
16 states that the likelihood of large over- or under-collections is small with a portfolio
17 made up exclusively of fixed-price full-requirements (“FPFR”) contracts. Mr. Ogden
18 posits that the megawatt-hours associated with the additional factors I identified as
19 potentially contributing to E-Factor rate volatility (solar PPA, EV-TOU program) are
20 small. Further, Mr. Ogden claims that, contrary to my concern, “the Company’s
21 proposed method of recovering the cash-out payment for net metering customers will
22 reduce the volatility of the E-Factor Rate.” Finally, Mr. Ogden claims that the
23 Company’s current Tariff No. 25 and the proposed pro-forma tariff supplement in Rider
24 No. 8 constitute sufficient safeguards to address large over- or under-collections.¹

¹ DLC Statement No. 4-R, pp. 9-14.

1 Q. DO YOU AGREE WITH MR. OGDEN THAT THERE ARE SUFFICIENT
2 SAFEGUARDS IN PLACE TO ADDRESS LARGE OVER- OR UNDER-
3 COLLECTIONS?

4 A. No, I do not for two reasons. First, the tariff language Mr. Ogden cites provides the
5 Company with the option, but not the obligation, to petition the Commission for an
6 interim revision to the Rider No. 8 - Default Service Supply ("DSS") when material
7 over- or under-collections are expected under the existing DSS.² The tariff language
8 cited by Mr. Ogden states that the Company "may" make such a filing, which equates
9 to an option for DLC but not an obligation to do so. Second, Mr. Ogden does not cite
10 any tariff language that defines what "material" over- or under-collection is. Therefore,
11 the safeguards Mr. Ogden claims to be sufficient amount to a Commission filing that
12 DLC may make, but need not make, when an undefined level of over- or under-
13 collections is projected by the Company. This may provide sufficient safeguards for
14 the Company, but it does not protect residential default service customers from
15 potentially excessive, and unnecessary, levels of rate instability.

16 Q. DO YOU AGREE WITH MR. OGDEN THAT CASH-OUT PAYMENT
17 FOR NET METERING CUSTOMERS WILL REDUCE THE VOLATILITY
18 OF THE E-FACTOR RATE?

19 A. No, I do not. If Mr. Ogden means that DLC's proposed method of recovering cash-out
20 payments for net metering customers is preferable to another method of recovering
21 these costs from the perspective of E-Factor rate volatility, it may be correct depending
22 on the alternative to which he is comparing the proposed cost recovery method.
23 However, compared to the status quo under Default Service Plan ("DSP") VIII where
24 the Company is not recovering these costs, the proposed method of cost recovery will

² *Id.*, p. 14, lines 11-16.

1 add to the volatility of the E-Factor rate. Mr. Ogden states that “the generation by
2 customer-generators offsets the amount of electric supply the Company purchases from
3 wholesale suppliers.”³ While this is true, it does not have any mitigating impact on the
4 E-Factor rate. DLC procures load-following service from wholesale suppliers in the
5 form of FPFR contracts, so the volumetric risk is incurred by the wholesale suppliers,
6 not by DLC. The Company’s over- or under-collection balance would not be any higher
7 or lower in the absence of the generation of customer-generators. However, the annual
8 cash-out payment to customer-generators is directly added to the over- or under-
9 collection balance. Therefore, the cash-out payments to net metering customers
10 increase the volatility of the E-factor rate.

11 Q. DO YOU AGREE WITH MR. OGDEN THAT A SEMI-ANNUAL
12 RECONCILIATION MECHANISM IS PREFERABLE TO YOUR
13 PROPOSAL TO AMORTIZE OVER- OR UNDER-COLLECTIONS OVER
14 12 MONTHS?

15 A. No, I do not. First, regardless of how unlikely it is for the Company to have a large
16 over- or under-collection balance, this possibility cannot be eliminated due to the
17 factors I enumerated in my Direct Testimony, such as the possibility of spot market
18 purchases in the event of supplier defaults or inability to award the required number of
19 FPFR contracts, revenue-cost mismatch from sales to Electric Vehicle Time-of-Use
20 program customers, the difference between the projected and realized solar PPA
21 revenues, and the cash-out payment for net metering customers. Second, my
22 reconciliation proposal is preferable to the Company’s proposal if the balance subject
23 to reconciliation is large, but the two proposals are nearly identical when reconciliation
24 balances are small since amortizing a small sum over six or 12 months entails a

³ *Id.*, p. 13 line 18 to p. 14 line 2.

1 negligible difference in terms of the impact on the E-Factor rate. Therefore, my
2 proposal has a potential upside relative to the Company's proposal, without any
3 downside.

4 **III. DLC's LONG-TERM SOLAR PPA PLAN**

5 Q. WHAT HAS DLC PROPOSED REGARDING THE LONG-TERM SOLAR
6 PPA PLAN?

7 A. The Company plans to file for the Commission's approval of long-term solar PPAs
8 with utility-scale solar energy projects in Pennsylvania, for a term longer than four
9 years but less than 20 years. In aggregate, the projects are proposed to be limited to not
10 more than 7 megawatts ("MW"). DLC anticipates buying the energy and alternative
11 energy credits ("AECs") from the solar project(s) as part of the PPA(s), with the
12 possibility that the Company would also purchase capacity and ancillary services
13 attributes of the project(s). DLC proposes to use the AECs resulting from the project(s)
14 to satisfy, in part, the solar AEC requirements associated with the Company's default
15 service loads. DLC plans to monetize the energy by selling it in PJM's real-time energy
16 market, rather than netting this energy from default service loads.

17 Q. DID YOU ADDRESS DLC'S LONG-TERM SOLAR PPA PLAN IN YOUR
18 DIRECT AND REBUTTAL TESTIMONIES?

19 A. Yes, I did. In my Direct Testimony, I recommended that DLC demonstrate that any
20 solar PPA that DLC would propose be at least revenue-neutral over the term of the
21 contract (i.e. the sum of the projected revenues from all attributes should not be lower
22 than the PPA payments made to the developer on a discounted cash flow basis) based
23 on forward price projections. I suggested that, as part of its solar PPA filing, DLC
24 should provide price projections for each attribute (energy, alternative energy credits,
25 capacity, ancillary services) of the solar PPA(s) over the term of the contract(s) and

1 demonstrate that the projects are either revenue-neutral or revenue-positive for the
2 default service customers.⁴

3 Q. TO WHICH WITNESS ARE YOU RESPONDING ON THIS ISSUE IN
4 YOUR SURREBUTTAL TESTIMONY?

5 A. I am responding to the Rebuttal Testimony of DLC Witness Mr. James Davis. Mr.
6 Davis disagrees with my recommendation that any solar PPA that DLC would propose
7 should be at least revenue neutral over the term of the contract. Mr. Davis claims that
8 energy and capacity price projections beyond three years would be speculative, so a
9 demonstration of revenue-neutrality would be subjective. He states that once bids are
10 received, the Commission will be in a better position to decide whether or not to enter
11 into the contract.⁵

12 Q. DO YOU AGREE WITH MR DAVIS THAT DLC'S SOLAR PPA FILING
13 NEED NOT INCLUDE A COMPARISON OF FORWARD PRICE
14 PROJECTIONS OF RELATED ATTRIBUTES TO THE COST OF THE
15 PPA?

16 A. No, I do not. While I agree that price projections beyond a few years depend on the
17 assumptions used in the analysis and thus are subjective, they are still an invaluable
18 part of project evaluation. The purpose of price projections is not to forecast future
19 energy, capacity or solar alternative energy credit ("AEC") prices with accuracy, but
20 to inform the decision maker on how the project (the solar PPAs in this instance) can
21 be expected to perform financially under a reasonable set of assumptions regarding
22 future prices, costs, and fundamental market developments affecting supply and
23 demand. This is a standard way of evaluating electric generating projects used by

⁴ OCA Statement No. 1, p. 18 line 19 to p. 19 line 2.

⁵ DLC Statement No. 1, p. 4 line 13 to p. 5 line 5.

1 utilities as well as by large end-use customers. Just because a solar PPA offer from a
2 developer is the lowest offer DLC receives as part of an independently monitored,
3 competitive solicitation does not necessarily make that PPA appropriate for DLC to
4 enter into on behalf of its default service customers. There may be various reasons for
5 even the most attractive bid to be “too high” at that time, such as challenges in access
6 to credit by the developers or disruptions in supply chains that make fixed-price
7 commitments too risky for vendors or developers. There needs to be a threshold price
8 to serve as a benchmark against which the reasonableness of the PPA can be assessed
9 to make a determination as to whether it represents a reasonable commitment to be
10 entered into on behalf of default service customers. The price projections that DLC
11 would generate would help all stakeholders, including the Commission, to determine
12 that threshold PPA price level.

13 Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

14 A. Yes, it does.

294985

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of Default Service Plan for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

VERIFICATION

I, Serhan Ogur, hereby state that the facts set forth in my Surrebuttal Testimony, OCA Statement 1-SR, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 28, 2020
*294905

Signature: _____

Serhan Ogur

Consultant Address: Exeter Associates, Inc.
10480 Little Patuxent Parkway
Suite 300
Columbia, MD 21044-2690

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company :
For Approval of Default Service Plan :
For the Period :
June 1, 2021 through May 31, 2025 :

Docket No. P-2020-3019522

DIRECT TESTIMONY

OF

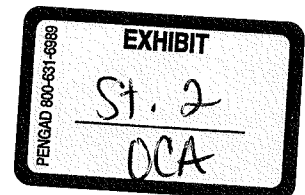
BARBARA R. ALEXANDER

Barbara Alexander Consulting LLC

ON BEHALF OF THE

OFFICE OF CONSUMER ADVOCATE

July 17, 2020



1 **I. INTRODUCTION AND SUMMARY**
2

3 Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

4 A. My name is Barbara R. Alexander. I am the sole member of Barbara Alexander Consulting
5 LLC. My address is 83 Wedgewood Dr., Winthrop, ME 04364. I appear in this case as a
6 witness on behalf of the Pennsylvania Office of Consumer Advocate (OCA).

7 Q. WHAT IS YOUR BACKGROUND AND EXPERIENCE WITH RESPECT TO THE
8 ISSUES ON WHICH YOU ARE PROVIDING TESTIMONY IN THIS PROCEEDING?

9 A. I opened my consulting practice in March 1996, after nearly ten years as the Director of
10 the Consumer Assistance Division of the Maine Public Utilities Commission. While there,
11 I testified as an expert witness on consumer protection, customer service and low-income
12 issues in rate cases and other investigations before the Commission. My consulting practice
13 is directed to consumer protection, customer service and low-income programs and policies
14 relating to the regulation of the telephone, electric and gas industries. In particular, I have
15 focused on the changes in policies and procedures required by state regulation in the
16 transition to retail competition. Among my areas of expertise are policies and programs
17 related to Default Service and related issues concerning the transition to retail competition
18 for both the electric and natural gas industries.

19 I am a graduate of the University of Michigan (B.A. 1968) and the University of
20 Maine School of Law (J.D. 1976).

21 I have been involved in the implementation of retail electric and natural gas
22 competition in Pennsylvania on behalf of the OCA for several years. With respect to issues

1 relating to retail market competition policies, I have filed testimony on behalf of the OCA
2 on policies that should govern the planning and acquisition of Default Service for residential
3 customers and on proposals to adopt Purchase of Receivables (POR) programs, Customer
4 Referral Programs, and other “retail market enhancement” programs for all of the
5 Pennsylvania electric and natural gas utilities. I have submitted testimony on behalf of the
6 OCA for Default Service Plan proposals submitted by FirstEnergy on behalf of its
7 Pennsylvania distribution companies, PECO Energy, and PPL Electric for the most recently
8 filed DSP plans. In addition, I submitted testimony on behalf of the OCA in Duquesne Light
9 Company’s prior DSP plans filed in 2012, 2014, and 2016. My updated CV with the specific
10 identification of relevant proceedings is attached as Exhibit BA-1.

11
12 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

13 A. I am filing Direct Testimony on behalf of the OCA with respect to the proposal by
14 Duquesne Light Company (DLC) to continue its Customer Standard Offer Program (SOP)
15 with certain changes and its proposal for a shopping program for customers enrolled in the
16 Customer Assistance Program (CAP), DLC’s program for bill payment assistance to low
17 income residential customers.

18 Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

19 A. The following conclusions and recommendations are discussed in further detail in my
20 testimony:

- 21 ■ DLC began the implementation of the SOP in August 2013. Since the last DSP
22 proceeding, DLC has enrolled an average of 2,000 residential customers in the SOP
23 annually. DLC maintains a fairly robust percentage of residential customers enrolled

1 with an EGS.

- 2 ▪ Customers who enroll in the SOP are given a 7% discount on the PTC in effect at the
3 time of their enrollment. The customer's price does not change for the 12-month
4 contract term. But, whether the customer's price retains its 7% reduction compared to
5 the PTC is a function of the change in the PTC during this 12-month contract. As a
6 result, it is possible for customers to see a larger discount if the PTC increases during
7 the term of the SOP contract or see a reduced discount or end up paying even more than
8 the PTC if the PTC decreases during the term of the SOP contract. An analysis of the
9 impact of the 7% discount (calculated on the PTC at the time of the enrollment) with
10 the actual changes in the PTC for residential customers in the DLC program shows that
11 customers have experienced a significant reduction or almost total loss of this discount
12 in 2019.
- 13 ▪ DLC agreed to revise its SOP scripts as a result of the settlement approved in its most
14 recent DSP proceeding (Docket No. P-2016-2543140). Based on my review of recent
15 customer call recordings, DLC customer service representatives provide the agreed
16 upon disclosures in most interactions with customers to whom the SOP is offered.
- 17 ▪ DLC has incurred relatively minor costs to implement this program to date and has
18 obtained all the necessary revenues through EGS participation fees, thus there are no
19 additional costs imposed on default service customers or ratepayers. DLC charges
20 EGSs an enrollment fee of \$10.28, and DLC does not propose to change this fee.
- 21 ▪ I disagree with DLC's proposal to change their SOP enrollment process to engage a
22 third-party contractor (AllConnect) to present and enroll customers in the program.
23 DLC's current method of implementing the SOP by referring interested customers

1 directly to a participating EGS should continue as it is a reasonable and low-cost
2 method to implement this program. In particular, DLC does not discuss the potential
3 for increased costs for this program and I do not recommend that ratepayers incurred
4 higher costs for the SOP.

- 5 ■ Prior to any proposal to implement the SOP in any future DSP, DLC should undertake
6 a survey or focus group with participating SOP customers to determine their opinion
7 of the program and to test their knowledge of the operation of the initial discounted
8 price with the movements in the PTC during the term of the contract. In addition, DLC
9 should explore why customers who are solicited to do so have not enrolled in the
10 program. This survey should also explore customer understanding of the EGS renewal
11 notices and opt-out terms of service that customers may have experienced.
- 12 ■ DLC should specifically conduct a study of the prices charged by the SOP suppliers
13 after the 12-month fixed price contract for customers who remain with the supplier
14 through the negative option renewal process. The evidence presented by PPL Electric
15 that most customers who remain with the SOP supplier experience significantly higher
16 generation supply prices and bills should be of interest and concern to DLC. Based on
17 this review DLC should consider a program rule that would return customers to default
18 service at the end of the SOP contract, thus allowing customers to choose any EGS or
19 re-enter the SOP.
- 20 ■ DLC currently does not allow Customer Assistance Program (CAP) customers to enroll
21 with an EGS, and this policy is applicable as well with the SOP. DLC has proposed a
22 CAP Shopping Program that complies with the Commission's guidelines and requires
23 that any EGS that participates in this program must ensure that CAP customers do not

1 pay more than the applicable Price to Compare (PTC) during the entire term of the EGS
2 contract. I have suggested some additional conditions I have identified in my
3 Testimony.

4 **II. BACKGROUND ON THE STANDARD OFFER REFERRAL PROGRAM**

5
6 Q. PLEASE DESCRIBE THE GENESIS OF THE CUSTOMER REFERRAL PROGRAM
7 AND ITS IMPLEMENTATION BY DLC.

8 A. The Commission issued its Final Order concerning proposals for its Intermediate Work
9 Plan to adopt retail market enhancements on March 2, 2012.¹ This Order contained
10 recommendations concerning how the EDCs should implement several market
11 enhancement programs, including the Standard Offer Customer Referral Program. The
12 Commission's Order established the following key parameters for this Program²:

- 13 • "The terms and conditions of the standard offer must be presented to customers
14 before they decide to enter the program." The enrollment by a customer will be on
15 an "opt-in" or voluntary basis.
- 16 • Participating EGSs must offer a 7% reduction in the PTC as compared to the PTC in
17 effect at the time of the offer.
- 18 • The contract term must be a minimum of four months and a maximum of twelve
19 months.
- 20 • The EGS must not charge an early termination fee during the term of the Referral
21 contract.

¹ Docket No. I-2011-2237952.

² Intermediate Work Plan Final Order at 32.

1 • The EGS must notify the participating customer at the end of the Referral Program term
2 of options to continue service (without the obligation of the 7% discount) and that
3 customers will remain with the EGS on a month-to-month basis, unless the customer
4 takes affirmative action to choose either a product offered by the EGS, a product
5 offered by another EGS, or elects to move to Default Service.

6 • The “bulk” of the costs for this program must be borne by the participating EGSs.

7 Q. PLEASE DESCRIBE THE CURRENT STATUS OF THE COMMISSION’S
8 DIRECTIVES ON THE SCRIPTS THAT THE EDCs SHOULD USE IN PRESENTING
9 THE SOP.

10 A. The Commission issued an Order in the most recent FirstEnergy DSP proceeding that
11 provided guidance on CAP Shopping programs and Referral Program scripts.³ In this
12 Order the Commission actually set forth specific script language.

13 FirstEnergy Call Center Mover/New Service Script:

14 Are you satisfied with what I have done for you today? I have completed your order. With your permission,
15 I will transfer you and your order information to our vendor. They will provide you with a confirmation
16 number, offer you potential rate savings through our Electric Choice Program, and help you to set up other
17 services if needed.”
18

19 First Energy PTC and High Bill Calls Script:

20 In Pennsylvania, you can choose the company that generates your electricity – also known as your electric
21 supplier – without impacting the quality of your service. Would you like to speak to a representative who can
22 offer you a potential rate savings by enrolling with an alternate supplier?
23

24 With regard to the third-party vendor that an EDC might contract with to enroll customers
25 in this program, the Commission ordered:

26 [CUSTOMER NAME], there are many registered electric suppliers doing business in the state of
27 Pennsylvania and you have the option of choosing any of them. In an effort to encourage choice, the State
28 Utility Commission has made the Standard Offer program available to you.

³ Docket No. P-2017-2637855 et al. Order (February 28, 2019).

1
2 The program offer is a 7 % discount off the current Price to Compare that you are currently paying with
3 [EDC NAME] as your default service supplier. There are no fees for selecting an alternate supplier today or
4 any penalties for changing suppliers before the 12 months are up.
5

6 The current Price to Compare rate for [EDC NAME] is [X.XX] cents per kilowatt-hour. The rate for this
7 Standard offer is X.XXX cents per kilowatt-hour. The Standard Offer rate may be higher or lower than the
8 price to compare and the percentage savings you will experience compared to [EDC NAME] supplier
9 generation will vary as the price to compare changes. The price to compare changes quarterly in March,
10 June, September and December, however your Standard Offer rate will remain fixed the same for 12 billing
11 cycles and is the same no matter which participating supplier you select.
12

13 You can cancel this contract anytime without penalty and select another supplier or return to default service
14 with [EDC NAME] for service at the Price To Compare. I can enroll you with an approved supplier of your
15 choice from our list or I can select one for you. Do you have questions? Do you agree to be enrolled with a
16 supplier for this program?
17

18 (NOTE: The underlining reflects the Commission's changes from its prior Tentative Order.)
19

20 In addition, the Commission issued a Secretarial Letter on January 23, 2020 to give
21 direction to the EDCs about certain aspects of the implementation of Default Service.⁴ In
22 this Secretarial Letter the Commission referenced SOP Referral Scripting and directed the
23 EDCs to the scripting language included in the FirstEnergy DSP Order quoted above,
24 stating, "We suggest that EDCs, when preparing their upcoming DSP filings, review the
25 Commission's actions in the above noted FirstEnergy proceeding and to include in their
26 filings analysis of their SOPs, the current scripting, and any proposed scripting that
27 adequately informs customers about the SOPs while maintaining important safeguards and
28 protections."⁵ As a result, I interpret this language to allow for an evaluation of the EDC's
29 "analysis" of its SOP and an evaluation as to whether the scripting maintains important
30 safeguards and protections.

31 Q. FOLLOWING THIS FINAL ORDER, HOW WAS THIS STANDARD OFFER

⁴ Investigation into Default Service and PJM Interconnection, LLC Settlement Reforms, Docket M-2019-3007101
(January 23, 2020).

⁵ Ibid., at 10.

1 REFERRAL PROGRAM IMPLEMENTED BY DLC?

2 Q. DLC's SOP has been operating with similar terms and conditions since the 2012 DSP
3 proceeding. DLC requires participating EGSs to implement a 12-month fixed price
4 contract with a 7% discount off the PTC in effect at the time of the customer's enrollment.
5 DLC has implemented this program "in house," and if a customer indicates an interest in
6 participation in the program, DLC transfers the customer to the selected EGS for
7 enrollment (or to any EGS that is randomly selected if the customer does not have a
8 preference). DLC bills for the EGS and collects the EGS charges that reflect the SOP price
9 under its Purchase of Receivables program, similar to how DLC treats other EGS charges
10 for customers who have enrolled with an EGS outside of the SOP. DLC charges the
11 participating EGSs a \$10.28 per customer enrollment fee to cover the costs of the program.

12 **III. ANALYSIS OF DLC'S IMPLEMENTATION OF THE CUSTOMER**
13 **STANDARD OFFER PROGRAM**
14

15 Q. PLEASE DESCRIBE THE RESULTS OF DLC'S IMPLEMENTATION OF THE SOP.

16 A. According to DLC, the volume of customers who agree to enroll in the SOP has generally
17 reflected an average of 2,000 annual enrollments for 2017 through 2019, for a total of
18 6,070.⁶ However, DLC generally has historically experienced a high level of customers
19 served by an EGS. As of March 2020, 38% of DLC's residential customers were enrolled
20 with an EGS.⁷ There is also a large number of EGSs who actively enroll or switch

⁶DLC Response to OCA-I-2.

⁷DLC Response to OCA-I-1.

1 residential customers—58 as of March 2020,⁸ although there is a high level of market share
2 by a few EGSs.⁹ Similar to trends that I have viewed in the pending PECO Energy and
3 PPL Electric DSP proceedings, DLC has seen lower levels of customer participation with
4 EGSs generally in recent years.¹⁰

5 Q. HOW MANY SUPPLIERS HAVE PARTICIPATED IN THE PROGRAM?

6 A. The number of EGSs participating in the program has varied, but with 2 to 7 EGSs
7 participating for the residential class.¹¹

8 Q. WHAT IMPACT HAS ENROLLING IN THE SOP HAD ON RESIDENTIAL
9 CUSTOMERS' BILLS?

10 A. I have reviewed the SOP program contract price (at 7% below the PTC in effect at the time
11 of enrollment) to compare with the actual PTC prices as they have changed for the period
12 of January 2018 through March 2020. DLC usually changes its PTC every six months, but
13 more frequent changes in 2018. During this period, the SOP price has never been in excess
14 of the PTC during the term of the 12-month SOP contract. However, some customers have
15 experienced a significant reduction in their actual discount from the PTC in effect during
16 their 12-month fixed price contracts.¹² Customers who enrolled in January 2018 were
17 offered an EGS contract with a fixed rate of 7.28 cents per kWh. At that time the PTC was
18 7.83 cents per kWh. In June 2018 the PTC increased to 7.96 cents per kWh, but then
19 decreased to 7.51 cents per kWh in October 2018 and in December the PTC was set at 7.45

⁸ DLC Response to OCA-I-4.

⁹ DLC Response to OCA-I-5.

¹⁰ DLC Response to OCA-I-3. DLC states that there were 24,000 fewer switches in 2019 compared to 2018.

¹¹ Direct Testimony of Katherine M. Scholl, DLC St.5 at 4.

¹² DLC Response to OCA-I-14. I attach this response as Exhibit BA-2.

1 cents per kWh.¹³ Therefore, customers who enrolled in January through May 2018
2 received at discount in excess of 7% starting in June 2018. However, customers who
3 enrolled in June 2018 with a fixed price contract of 7.40 cents per kWh when the PTC was
4 7.96 cents per kWh had a reduced discount starting in December 2018 when the PTC was
5 lowered to 7.45 cents per kWh. Those customers saw their 7% discount drop to less than
6 1% compared to the PTC. In June 2019 the PTC dropped again to 7.41 cents per kWh so
7 that customers who enrolled in late 2018 received basically no discount at all for most of
8 their 12-month fixed price contract. These fluctuations on the actual discount that
9 customers receive off the PTC during their 12-month SOP contracts is the primary reason
10 why I raise concerns about the disclosures and scripts that accompany this program.

11 Q. WHAT ARE THE COSTS OF THIS PROGRAM AND HOW ARE THOSE COSTS
12 RECOVERED?

13 A. DLC reduced its \$25 enrollment fee to \$10.28 several years ago to reflect their efficient
14 enrollment process. As a result, DLC has not incurred costs in excess of the EGS
15 enrollment fees and has not charged ratepayers additional costs for this program. This
16 enrollment fee is significantly lower than other Pennsylvania EDCs who typically charge
17 an enrollment fee of \$25 or more. DLC's lower enrollment fee is the result of its method
18 of presenting the program to its customers and, based on the customer's interest,
19 transferring the customer to one of the participating EGSs to discuss the terms and
20 conditions and enroll the customer without the aid of third party enrollment agents relied
21 upon by other EDCs. In my opinion, the program has been very cost effective when costs

¹³ I do not know why the PTC changed so frequently in 2018.

1 are compared to the volume of enrollments.

2 Q. HAVE YOU INVESTIGATED WHETHER DLC'S REPRESENTATIVES ACTUALLY
3 PROVIDE THE REVISED DISCLOSURE APPROVED IN THE SETTLEMENT OF
4 THE 2016 DSP?

5 A. Yes. I have reviewed 10 sample call recordings from February 2020 provided by DLC that
6 include a presentation of the SOP to customers who contacted DLC to establish new service
7 or transfer service to a different location.¹⁴

8 Q. WHAT DID YOU FIND UPON REVIEW OF THE 10 CALLS?

9 A. Almost without exception the DLC customer service representative read the required script
10 as approved in the last DSP proceeding. Also, almost without exception, customers
11 declined an interest in the program. Of the 10 calls, all but one representative read the
12 script correctly¹⁵ and only one customer indicated an interest in the program and proceeded
13 to the enrollment phase.¹⁶ There are no grounds to conclude that DLC's presentation of
14 the program led to a lack of interest by customers. Only one customer asked a follow up
15 question and indicated a desire to enroll. Therefore, the lack of customer interest after
16 hearing the disclosures cannot be reasonably connected to the DLC presentation of the
17 program or lack of time to accurately or more completely explain the program. I concluded
18 that the customers who politely listened to the script simply were not interested in enrolling
19 with a supplier.

20 Q. DOES DLC PROPOSE ANY CHANGE TO THE SOP PROGRAM IN THIS

¹⁴ DLC Response to OCA-II-1 (a) through (j) (**Highly Confidential**). I have not included any personal or customer specific information in my summary of the call recordings.

¹⁵ That customer representative did not read the script and offered to "save with a discount," but that customer declined interest in the program.

¹⁶ The customer representative in this call read the entire script and answered the customer's questions correctly.

1 PROCEEDING?

2 A. Yes. DLC proposes to change its SOP by expanding on their current contract with
3 AllConnect to handle the bulk of the explanation and disclosures for the SOP and enroll
4 customers in the EGS fixed price contracts, thus eliminating the DLC process of
5 transferring customers to the EGS for enrollment. This proposal is being made on the
6 grounds that DLC believes that its enrollment process has resulted in a lower participation
7 in the SOP compared to other EDCs. According to DLC Witness Scholl, DLC's proposal
8 of outsourcing the SOP to AllConnect "will increase customer participation by increasing
9 referral rates and potentially also referral to enrollment rates."¹⁷ It should be noted that
10 DLC refers to the "referral rate" as the percentage of customers who agree to be referred
11 to a supplier (or, in the case of other EDCs, referred to the third party agent) and the
12 "enrollment rate" as the percentage of customers who actually enroll with a supplier as a
13 result of the referral. As a result, DLC is proposing to adopt the two-step enrollment
14 process used by other EDCs in which the EDC customer representative introduces the
15 concept of the SOP, solicits the customer's interest in hearing more or enrolling, and then
16 transfers the customers to a third party contractor, AllConnect in this case. This change
17 will require that DLC change the scripts that its own representatives use (and train its
18 representatives on that new script and the role of AllConnect). In addition, DLC would
19 have to develop new scripts and training materials for AllConnect and supervise
20 AllConnect's implementation of those scripts and training guidelines. It is highly unlikely
21 that these changes and oversight responsibilities can be accomplished without raising the

¹⁷ DLC St. No. 5, at 8, lines 15-16.

1 fee to the EGSs to cover incremental costs.

2 **IV. RECOMMENDATIONS AND REFORMS FOR DLC'S STANDARD OFFER**
3 **PROGRAM**

4
5 Q. DO YOU AGREE WITH DLC'S PROPOSAL TO RELY ON ALLCONNECT TO
6 PRESENT THE SOP DETAILS AND ENROLL CUSTOMERS?

7 A. No. I see no reason to change the current program. DLC is presenting the program as
8 required in the last DSP Settlement. The script used by DLC presents the key aspects of
9 the program in a balanced and reasonable manner. Similar to other EDCs in recent years,
10 DLC is experiencing a lower level of customer interest in the program. Furthermore, I am
11 concerned that transferring customers to AllConnect will result in that contractor marketing
12 the program in a promotional and "sales" manner as opposed to a fair and neutral
13 presentation of the program. This concern is based on several years of listening to calls
14 between third party contractors (including AllConnect) and EDC customers as I have
15 documented in prior DSP proceedings.¹⁸ The current DLC program is being implemented
16 at a significantly lower cost compared to other Pennsylvania EDCs and is currently in
17 compliance with Commission guidance and its prior Settlement. This program should
18 continue without the changes recommended by DLC. There are other specific reasons to
19 oppose DLC's request:

- 20 • There is no basis for concluding that transferring the call to AllConnect to hear more
21 details about the SOP would result in a higher level of enrollment unless there is some

¹⁸ And, as I have documented in my recent review of third party agent call recordings in the PECO and PPL Electric DSP proceedings this year.

1 evidence that DLC's current approach is the cause of customers' lack of interest in the
2 program. I see no basis for such a conclusion and DLC offers none.

- 3 • DLC's claim that other EDCs enroll a higher percentage of customers in the SOP does
4 not reflect the more recent enrollment trends as documented by PECO Energy and PPL
5 Electric in their pending DSP proceedings. DLC's reliance on FirstEnergy EDC
6 enrollment data does not reflect any pending or recently concluded public proceeding;
- 7 • I am concerned that transferring customers to AllConnect will result in that contractor
8 marketing the program in a promotional manner as opposed to a fair and neutral
9 presentation of the program. This concern is based on several years of listening to calls
10 between third party contractors (including AllConnect) and EDC customers as I have
11 documented in prior DSP proceedings;¹⁹
- 12 • While not addressed by DLC, this proposal to engage AllConnect in the SOP is likely
13 to increase costs for this program. I do not recommend that ratepayers incur additional
14 costs for the SOP, particularly because there is no documented evidence that DLC's
15 current SOP is in need of reform; and
- 16 • Finally, the purpose of the SOP is not to conduct a competition among the EDCs to
17 promote enrollment. The purpose of the SOP is to offer customers not currently served
18 by an EGS with the opportunity to experience the retail energy market. That
19 opportunity has been available to Pennsylvania residential customers for over a decade
20 and the SOP has been in existence since 2013. DLC has historically experienced a high

¹⁹ And, as I have documented in my recent review of third party agent call recordings in the PECO DSP proceedings this year. I also recently filed Supplemental Direct testimony in the pending PPL Electric DSP that describes a pattern of inappropriate presentations of the SOP.

1 level of shopping activity and it is reasonable to conclude that customers are aware of
2 this opportunity and exercise it or not based on their own experience and/or interest.

3 Q. BASED ON YOUR REVIEW OF THESE CUSTOMER CALL RECORDINGS, DO
4 YOU HAVE ANY ADDITIONAL REASON TO REJECT DLC'S PROPOSAL TO
5 TRANSFER CUSTOMERS TO ALLCONNECT?

6 A. Yes. In each of the 10 customer call recordings I reviewed, the DLC customer
7 representatives completed the customer's transaction with DLC, but ended the call with a
8 statement, "I am now going to transfer you to AllConnect to verify your service with
9 Duquesne and present you with additional services."²⁰ This statement does not allow
10 customers to decline this transfer, implies that the customer's service with Duquesne is not
11 yet complete, and calls into question the appropriateness of this relationship with
12 AllConnect. It is my understanding from my prior experience with AllConnect's services
13 provided to other EDCs, that this transfer is done to present the customer with optional
14 services, such as internet, cable TV, home security services. These services are not
15 provided by or billed by DLC. As a result, the basic business reason for this arrangement
16 is not clear, but this arrangement and method of transferring calls to AllConnect would be
17 improper for presentation of the SOP. Nonetheless, I recommend that DLC make an
18 immediate change to eliminate this wording to make clear that the transfer is an option for
19 customers and has nothing to do with verification of DLC's services.

20 Q. DO YOU HAVE ANY FURTHER RECOMMENDATIONS FOR EVALUATING THE
21 SOP?

²⁰ Alternative wording heard in one call, "to verify everything is correct."

1 A. Yes. Since DLC has not conducted any survey or research to determine customer reaction
2 to this program,²¹ their understanding of the program, or their experience with the program
3 to date, I recommend that DLC conduct a relatively simple survey and/or focus group of
4 customers participating in this program. DLC should seek to gain information about
5 customers' understanding of the program, the nature of the 7% discount, whether
6 customers understood that the PTC would change and impact the level of that discount
7 during the term of the contract, and their awareness of the comparison of the EGS price
8 and the PTC during the term of the contract. I also recommend that DLC's survey include
9 questions relating to the customer's experience with the EGS renewal notices and proposed
10 terms of service after the conclusion of the 12-month SOP contract. This information
11 would be very valuable for the evaluation of the SOP and a determination of whether it
12 would be appropriate to continue and if so, under what change in terms or reforms to
13 respond to customer participation experiences. Furthermore, my recommendation reflects
14 a similar survey conducted by PECO Energy that clearly documented a significant lack of
15 understanding of the program by SOP customers.

16 Q. SHOULD DLC ALSO MONITOR CUSTOMER BILL IMPACTS DURING THE 12-
17 MONTH SOP CONTRACTS AS WELL AS THE RENEWAL PRICES CHARGED BY
18 SUPPLIERS AT THE END OF THE SOP CONTRACTS?

19 A. Yes. DLC does not currently study the impact of the SOP price on customer bills during
20 their 12-month contracts.²² Nor does DLC study the prices that customers are charged if

²¹ DLC Response to OCA-I-18, I-19, and I-20.

²² DLC Response to OCA-I-13.

1 they remain with their supplier at the end of the 12-month SOP contract.²³ This data reflect
2 crucial aspects of this program that should be routinely gathered and evaluated as part of
3 the decision to continue the SOP. This program has been in effect since 2013 and it is fair
4 to determine the criteria that should govern its continuation by examining customer
5 experience through surveys and/or focus groups, as well as the actual bill impacts and
6 supplier prices charged to these customers who are enticed to enroll by the EDC. This
7 latter concern is now relevant in light of PPL Electric's DSP testimony that documented
8 that most SOP customers who remain with the SOP supplier after the contract term (all of
9 which typically include negative option renewal clauses) are routinely charged a much
10 higher price than the SOP contract or the PTC.²⁴ Based on this review, DLC should
11 consider PPL Electric's proposal to return customers to default service at the end of the
12 SOP contract, thus allowing those customers to choose an ESG at any time or re-enter the
13 SOP program.

14 **V. DLC'S PROPOSAL FOR A CAP SHOPPING PROGRAM IS REASONABLE**

15
16 Q. HAS DLC PROPOSED A PROGRAM TO ALLOW CAP CUSTOMERS TO SHOP FOR
17 AN EGS?

18 A. Yes. This proposed program appears to reflect the basic Commission guidelines for a CAP
19 Shopping Program.²⁵

20 Q. DO YOU AGREE WITH DLC'S OVERALL PROGRAM DESIGN?

²³ DLC Response to OCA-I-16.

²⁴ Direct Testimony of Michelle LaWall-Schmidt, PPL Statement No. 4, Docket No. P-2020-2019356 ((March 25, 2020). I attach a chart showing the results of PPL's analysis as Exhibit BA-3.

²⁵ *Proposed Policy Statement Order*, Docket No. M-2018-3006578 (Order Entered on February 28, 2019).

1 A. Yes. It is vital for any program that allows CAP shopping for generation supply service to
2 ensure that customers pay no more than they would pursuant to the PTC. This policy is
3 essential to make sure that CAP customer bills are not higher than what would otherwise
4 occur under the current CAP rate and program rules. The purpose of the CAP is to address
5 the need for affordability of essential electric service to meet the health and safety needs
6 of low income households. It would be harmful to these customers to expose them to any
7 risk of increased prices and bills with a customer choice program when it has already been
8 well documented in other DSP proceedings that EGS prices to CAP customers are typically
9 higher than the applicable PTC. Furthermore, since residential ratepayers subsidize the
10 costs of the CAP, any customer choice program for these customers should not contribute
11 to higher costs from other ratepayers if EGSs are allowed to charge a price higher than the
12 PTC for these customers. The program appears to reflect the key consumer protections
13 outlined by the Commission in its prior orders. For example, DLC has proposed that:

- 14 • EGSs that seek to serve CAP customers must confirm their understanding and
15 agreement with the program and complete a registration form with DLC;
- 16 • that EGSs must not charge the CAP customers a rate that exceeds the PTC during
17 any month that the EGS contract is in effect;
- 18 • the CAP contract must not include any additional fees or charges; and
- 19 • CAP customers will be automatically returned to default service if the EGS charges
20 more than the applicable PTC, does not propose to renew the CAP customer contract under
21 the rate ceiling requirement or the customer does not enter into another EGS contract with
22 these same rate conditions.

23 DLC also proposes outreach and education to CAP customers about this program.

1 DLC proposes that certain operational costs be recovered from residential customers via
2 the Universal Service Charge and that the capital costs to implement this program should
3 be recovered in base rates in a future base rate proceeding. Finally, DLC proposes that a
4 minimum of five EGSs should commit to participate in the program prior to incurring the
5 costs to implement the program. These conditions and criteria are essential to my overall
6 approval of the DLC CAP Shopping program as proposed.

7 Q. DO YOU HAVE SUGGESTIONS FOR A MORE SUCCESSFUL IMPLEMENTATION?

8 A. I have the following suggestions:

9 • This program must be accompanied by robust and well-designed customer
10 education materials to CAP customers about this new ability to shop and select an EGS.
11 However, DLC has not submitted any of the materials or details about its promised
12 educational program. As a result, it is difficult to agree with a program that will require
13 careful and well-designed educational materials that, as I recommend, should include a
14 customer feedback mechanism to ensure that CAP customers understand this program and
15 the consumer protections associated with it. I recommend that DLC be required to develop
16 and share its customer educational materials and the means by which it will conduct
17 ongoing research associated with the measurement of success of this program with
18 stakeholders prior to the program's implementation and that stakeholders have the ability
19 to bring disputes and issues of policy and content to the Commission for resolution. The
20 alternative is to allow DLC to implement this program without sufficient oversight.

21 • DLC should be allowed to propose revisions to or halt the CAP Shopping Program
22 if the number of participating suppliers drops below 5 over a substantial period of time.

23 • DLC proposes that the capital costs to implement the CAP shopping program be

1 recovered from customers in a future base rate case. I question whether this is appropriate.
2 Given DLC's proposal that the program costs will not be incurred until at least five EGSs
3 sign up to implement this program and solicit CAP customer enrollments, it would be a
4 proper incentive to impose those implementation costs on EGSs as a means of testing their
5 commitment to actually participate in the program for a given period of time. Otherwise,
6 the potential that DLC will incur costs that it seeks to impose on ratepayers if most or all
7 of the EGSs drop out of the program within a year or two is a realistic one, resulting in
8 increased risks for ratepayers. Any EGS commitment must include a sufficient period of
9 time to justify the expense of this program.

10 • I object to recovery of any of the costs for this program via the Universal Service
11 Charge. If there are educational expenses associated with this program, such costs could
12 be reasonably recovered in the Customer Education Charge (as proposed by PECO
13 Energy). But, the costs for this program should not add to the ratepayer support for the
14 Universal Service programs. In addition, similar to my recommendation for the recovery
15 of the capital costs for implementation of this program, some portion of the costs should
16 be required to be funded by the EGSs to test their commitment to actually participate in the
17 CAP Shopping Program.

18
19 Q. DOES THIS COMPLETE YOUR TESTIMONY AT THIS TIME?

20 A. Yes.

Exhibit BA-1

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Arkansas Attorney General
The Public Utility Project of New York
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District of Columbia Office of People's Counsel
Delaware Division of Public Advocate
Maryland Office of People's Counsel

Areas of Expertise:

- Default Service, Consumer Protection, Service Quality, and Universal Service policies and programs associated with the alternative rate plans and mergers;
- Consumer Protection and Service Quality policies and programs associated with the regulation of competitive energy and telecommunications providers;
- The regulatory policies associated with the regulation of Credit, Collection, Consumer Protection, Low Income, and Service Quality programs and policies for public utilities;
- Customer Education and Rate design and pricing policies applicable to residential customers; and
- Advanced Metering Infrastructure and Grid Modernization costs and benefits, time-based pricing proposals, and performance standards.

Prior Employment

DIRECTOR

*Consumer Assistance Division
Maine Public Utilities Commission*

1986-96

Augusta, Maine

One of five division directors appointed by a three-member regulatory commission and part of commission management team. Direct supervision of 10 employees, oversight of public utility consumer complaint function, appearance as an expert witness on customer services, consumer protection, service quality and low income policy issues before the PUC. Chair, NARUC Staff Subcommittee on Consumer Affairs.

SUPERINTENDENT

1979-83

*Bureau of Consumer Credit Protection
Department of Professional and Financial Regulation*

Augusta, Maine

Director of an independent regulatory agency charged with the implementation of Maine Consumer Credit Code and Truth in Lending Act. Investigations and audits of financial institutions and retail creditors, enforcement activities, testimony before Maine Legislature and U.S. Congress.

Education

JURIS DOCTOR

1973-76

University of Maine School of Law

Portland, Maine

Admitted to the Bar of the State of Maine, September 1976. Currently registered as "inactive."

B.A. (WITH DISTINCTION) IN POLITICAL SCIENCE

1964-68

University of Michigan

Ann Arbor, Michigan

Publications and Testimony

“How to Construct a Service Quality Index in Performance-Based Ratemaking”, The Electricity Journal, April, 1996

“The Consumer Protection Agenda in the Electric Restructuring Debate”, William A. Spratley & Associates, May, 1996

Direct Testimony on behalf of the Telecommunications Workers Union, Telecom Public Notice 96-8, Price Cap Regulation and Related Issues, Canadian Radio-Television and Telecommunications Commission, September, 1996. [Analysis of and recommendations concerning the need to regulate service quality in move to price cap regulation]

Direct Testimony on behalf of Public Counsel Section, Office of Attorney General, Docket No. UE-960195, Application by Puget Sound Power and Light Co. And Washington Natural Gas Co. For Approval of Merger), Washington Utilities and Transportation Commission, September, 1996 [Need for and design of a Service Quality Index for both electric and gas business units as part of a multi-year rate plan]

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Direct, Surrebuttal and Supplemental Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Implementation of Chapter 32 of The Public Utility Code Regarding Pittsburgh Water and Sewer Authority – Stage 1, Docket Nos. M-2018-2640802 and M-2018-2640803 (April, May and August 2019) [Analysis of consumer protection, customer service, and customer education programs of large water and wastewater utility]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company, LLC and Peoples Gas Company, LLC for all of the Authority and the Necessary Certificates of Public Convenience to Approve a Change in Control of Peoples Natural Gas Company, LLC and Peoples Gas Company LLC by Way of the Purchase of All of LDC Funding, LLC's Membership Interests by Aqua America, Inc., Docket Nos. A-2018-3006061, A-2018-3006062, and A-2018-3006063 (April and May 2019) [Customer Service, Consumer Protection, and Universal Service conditions for merger]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers' Council, before the Ohio Public Utilities Commission, In the Matter of the Commission's Investigation of PALMco Power OH, LLC dba Indra Energy and PALMco Energy OH, LLC dba Indra Energy, Case No. 19-957-GE-COI (September 4, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers' Council, before the Ohio Public Utilities Commission, In the Matter of the Commission's Investigation of Verde Energy USA Ohio LLC, Case No. 19-0958-GE-COI (October 2, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co. and West Penn Power Co. for Approval of Their Involuntary Remote Disconnect Procedures, Docket No. P-2019-3013979 et al. (March 20, 2020) [Criteria for remote disconnection of service with AMI]

Rebuttal Testimony on behalf of the Interstate Gas Supply, Inc., Direct Energy Services LLC and Shipley Choice LLC v. Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co., West Penn Power Co., Docket Nos. C-2019-30138-5 et al. (May 2020) [Complaint by retail suppliers seeking to bill non-basic services on utility bill]

Alexander, Barbara, "An Evaluation of Arizona Public Service Company's Customer Education Plan and its Implementation," prepared on behalf of the Staff of the Arizona Corporation Commission, Docket Nos. E-01345A-19-0236 and E-01345A-19-0003 (May 15, 2020)

Direct and Supplemental Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program for the Period of June 1, 2021 through May 31, 2025, Docket No. P-2020-3019356 (June and July 2020) [Standard Offer Program and low income shopping program for retail market programs]

Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy for Approval of Default Service Program for the Period June 1, 2021 through May 31, 2025, Docket No. P-2020-3019290 (June and July 2020),) [Standard Offer Program and low income shopping program for retail market programs]

Presentations and Training Programs:

- Presentation on Consumer Protection Policies for Solar Providers, New Mexico Public Regulatory Commission, Santa Fe, NM, January 2017
- Presentation on Residential Rate Design Policies, National Energy Affordability and Energy Conference, Denver, CO., June 2016
- Presentation on "Regulatory-Market Arbitrage: From Rate Base to Market and Back Again," before the Harvard Electricity Policy Group, Washington, D.C., March 2016.
- Presentation on Residential Rate Design and Demand Charges, NASUCA, November 2015.
- Alexander, Barbara, "Residential Demand Charges: A Consumer Perspective," presentation for Harvard Electricity Policy Group, Washington, D.C., June 2015.
- Presentation on "Future Utility Models: A Consumer Perspective," for Kleinman Center for Energy Policy, U. of Pennsylvania, August 2015.
- Presentation, EUCI Workshop on Demand Rates for Residential Customers, Denver, CO [May 2015]
- Presentation, Smart Grid Future, Brookings Institute, Washington, DC [July 2010]
- Participant, Fair Pricing Conference, Rutgers Business School, New Jersey [April 2010]
- Presentation on Smart Metering, National Regulatory Conference, Williamsburg, VA [May 2010]
- Presentation on Smart Metering, Energy Bar Association Annual Meeting, Washington, DC [November 2009]
- Presentation at Workshop on Smart Grid policies, California PUC [July 2009]
- National Energy Affordability and Energy Conference (NEAUC) Annual Conference
- NARUC annual and regional meetings
- NASUCA annual and regional meetings
- National Community Action Foundation's Annual Energy and Community Economic Development Partnerships Conference
- Testimony and Presentations to State Legislatures: Virginia, New Jersey, Texas, Kentucky, Illinois, and Maine
- Training Programs for State Regulatory Commissions: Pennsylvania, Georgia, Kentucky, Illinois, New Jersey

- DOE-NARUC National Electricity Forum
- AIC Conference on Reliability of Electric Service
- Institute of Public Utilities, MSU (Camp NARUC) [Instructor 1996-2006]
- Training Programs on customer service and service quality regulation for international regulators (India and Brazil) on behalf of Regulatory Assistance Project
- Georgia Natural Gas Deregulation Task Force [December 2001]
- Mid Atlantic Assoc. of Regulatory Utility Commissioners [July 2003]
- Illinois Commerce Commission's Post 2006 Initiative [April 2004]
- Delaware Public Service Commission's Workshop on Standard Offer Service [August 2004]

Exhibit BA-2

Office of Consumer Advocate
Interrogatories

Duquesne Light Company
Docket No. P-2020-3019522

Set I

Witness: Katherine M. Scholl

OCA I- 14

14. For the period January 2018 through the most recent current month, provide the monthly number of customers who enrolled in the Standard Offer Program, the monthly price offered for the fixed price Standard Offer Contract, and the applicable Price to Compare in effect for that month.

Response:

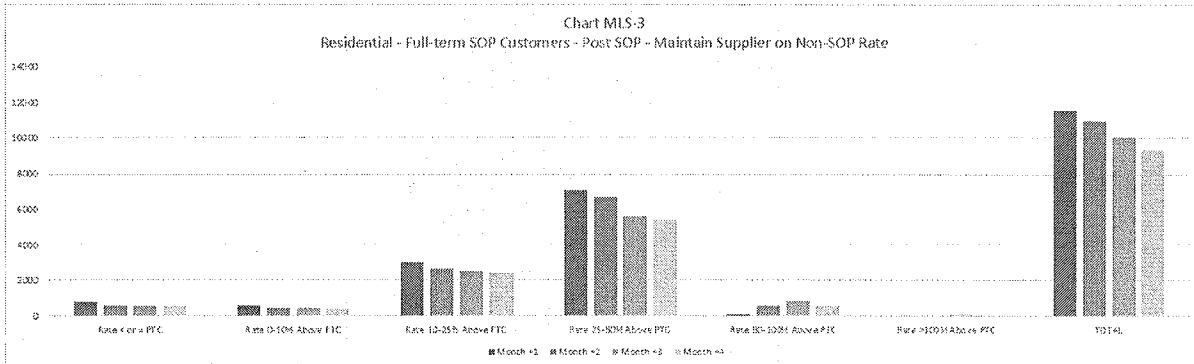
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
# Enrollments	152	118	151	137	144	189	146	272	157	175	184	202
Monthly Price Offered	\$0.0728	\$0.0728	\$0.0728	\$0.0728	\$0.0728	\$0.0740	\$0.0740	\$0.0740	\$0.0740	\$0.0698	\$0.0698	\$0.0693
PTC	\$0.0783	\$0.0783	\$0.0783	\$0.0783	\$0.0783	\$0.0796	\$0.0796	\$0.0796	\$0.0796	\$0.0751	\$0.0751	\$0.0745

	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
# Enrollments	218	162	148	152	191	143	194	315	174	124	100	92
Monthly Price Offered	\$0.0693	\$0.0693	\$0.0693	\$0.0693	\$0.0693	\$0.0689	\$0.0689	\$0.0689	\$0.0689	\$0.0689	\$0.0689	\$0.0660
PTC	\$0.0745	\$0.0745	\$0.0745	\$0.0745	\$0.0745	\$0.0741	\$0.0741	\$0.0741	\$0.0741	\$0.0741	\$0.0741	\$0.0710

	Jan-20	Feb-20	Mar-20
# Enrollments	121	71	114
Monthly Price Offered	\$0.0660	\$0.0660	\$0.0660
PTC	\$0.0710	\$0.0710	\$0.0710

Exhibit BA-3

PPL Response to OCA-I-7, attachment 1, Chart MLS-3.




BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of Default Service Plan for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts set forth in my Direct Testimony, OCA Statement 2, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: July 17, 2020
*292283

DocuSigned by:

Signature: 8D0E58CA47E24C2...
Barbara R. Alexander

Consultant Address: Barbara Alexander Consulting, LLC
83 Wedgewood Drive
Winthrop, Maine 04364

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company :
For Approval of Default Service Plan : Docket No. P-2020-3019522
For the Period :
June 1, 2021 through May 31, 2025 :

REBUTTAL TESTIMONY

OF

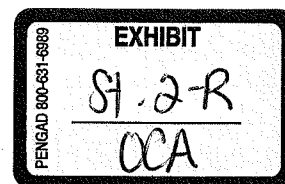
BARBARA R. ALEXANDER

Barbara Alexander Consulting LLC

ON BEHALF OF THE

OFFICE OF CONSUMER ADVOCATE

August 14, 2020



1 Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

2 A. My name is Barbara R. Alexander. I am the sole member of Barbara Alexander Consulting
3 LLC. My address is 83 Wedgewood Dr., Winthrop, ME 04364. I appear in this case as a
4 witness on behalf of the Pennsylvania Office of Consumer Advocate (OCA).

5 Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS PROCEEDING?

6 A. Yes. I filed Direct Testimony on behalf of the OCA on July 17, 2020.

7 A. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

8 A. I am filing Rebuttal Testimony on behalf of the OCA in response to the Direct Testimony
9 of Christopher H. Kallaher on behalf of Interstate Gas Supply, Inc., Shipley Choice LLC,
10 NRG Energy, Inc., Vistra Energy Corp., Engie Resources LLC, WGL Energy Services,
11 Inc., and Direct Energy Services, LLL (“EGS Parties”).¹ I will address Mr. Kallaher’s
12 testimony concerning the Standard Offer Program (SOP) and the CAP Shopping Program.
13 In addition, I am filing Rebuttal Testimony in response to the Direct Testimony of Harry
14 Geller on behalf of CAUSE-PA.

15 Q. AS A RESULT OF YOUR REVIEW OF THE EGS PARTIES’ TESTIMONY, DO YOU
16 HAVE ANY CHANGES YOU WISH TO MAKE TO YOUR RECOMMENDATIONS
17 AS SET FORTH IN YOUR DIRECT TESTIMONY?

18 A. No. My recommendations remain as follows:

19 ▪ I disagree with Duquesne Light Company’s (DLC) proposal to change their SOP
20 enrollment process to engage a third-party contractor (AllConnect) to present the
21 program and enroll customers in the program. DLC’s current method of implementing
22 the SOP by referring interested customers directly to a participating EGS should

¹ EGS Parties’ Statement No. 1.

1 continue as it is a reasonable and low-cost method to implement this program.²

- 2 ▪ Prior to any proposal to implement the SOP in any future DSP, DLC should undertake
3 a survey or focus group with participating SOP customers to determine their opinion
4 of the program and to test their knowledge of the operation of the initial discounted
5 price with the movements in the PTC during the term of the contract. In addition, DLC
6 should explore why customers who are solicited to do so have not enrolled in the
7 program. This survey should also explore customer understanding of the EGS renewal
8 notices and opt-out terms of service that customers may have experienced.
- 9 ▪ DLC should specifically conduct a study of the prices charged by the SOP suppliers
10 after the 12-month fixed price contract for customers who remain with the supplier
11 through the negative option renewal process. The evidence presented by PPL Electric
12 that most customers who remain with the SOP supplier experience significantly higher
13 generation supply prices and bills should be of interest and concern to DLC. Based on
14 this review DLC should consider a program rule that would return customers to default
15 service at the end of the SOP contract, thus allowing customers to choose any EGS or
16 re-enter the SOP.
- 17 ▪ DLC currently does not allow Customer Assistance Program (CAP) customers to enroll
18 with an EGS, and this policy is applicable as well with the SOP. DLC has proposed a
19 CAP Shopping Program that complies with the Commission's guidelines and requires
20 that any EGS that participates in this program must ensure that CAP customers do not
21 pay more than the applicable Price to Compare (PTC) during the entire term of the EGS

² DLC proposes to increase the EGS fee to \$30 per enrollment to pay for this third party administrator. However, what typically occurs with other EDCS is that DLC will pay the third party administrator for the enrollment with these EGS fees, thus contributing to the administrator's incentive to enroll customers.

1 contract. This program should be implemented with the conditions identified in my
2 Direct Testimony, namely:

- 3 ○ This program must be accompanied by robust and well-designed customer
4 education materials to CAP customers about this new ability to shop and select an
5 EGS. However, DLC has not submitted any of the materials or details about its
6 promised educational program. As a result, it is difficult to agree with a program
7 that will require careful and well-designed educational materials that, as I
8 recommend, should include a customer feedback mechanism to ensure that CAP
9 customers understand this program and the consumer protections associated with it.
10 I recommend that DLC be required to develop and share its customer educational
11 materials and the means by which it will conduct ongoing research associated with
12 the measurement of success of this program with stakeholders prior to the program's
13 implementation and that stakeholders have the ability to bring disputes and issues
14 of policy and content to the Commission for resolution. The alternative is to allow
15 DLC to implement this program without sufficient oversight.
- 16 ○ DLC should be allowed to propose revisions to or halt the CAP Shopping Program
17 if the number of participating suppliers drops below 5 over a substantial period of
18 time.
- 19 ○ DLC proposes that the capital costs to implement the CAP shopping program be
20 recovered from customers in a future base rate case. I question whether this is
21 appropriate. Given DLC's proposal that the program costs will not be incurred until
22 at least five EGSs sign up to implement this program and solicit CAP customer
23 enrollments, it would be a proper incentive to impose those implementation costs

1 on EGSs as a means of testing their commitment to actually participate in the
2 program for a given period of time. Otherwise, the potential that DLC will incur
3 costs that it seeks to impose on ratepayers if most or all of the EGSs drop out of the
4 program within a year or two is a realistic one, resulting in increased risks for
5 ratepayers. Any EGS commitment must include a sufficient period of time to justify
6 the expense of this program.

- 7 ○ I object to recovery of any of the costs for this program via the Universal Service
8 Charge. If there are educational expenses associated with this program, such costs
9 could be reasonably recovered in the Customer Education Charge (as proposed by
10 PECO Energy). But, the costs for this program should not add to the ratepayer
11 support for the Universal Service programs. In addition, similar to my
12 recommendation for the recovery of the capital costs for implementation of this
13 program, some portion of the costs should be required to be funded by the EGSs to
14 test their commitment to actually participate in the CAP Shopping Program.

15 Q. AS A RESULT OF YOUR REVIEW OF THE TESTIMONY OF HARRY GELLER ON
16 BEHALF OF CAUSE-PA, DO YOU HAVE ANY ADDITIONAL
17 RECOMMENDATIONS?

18 A. Yes. Mr. Geller's Direct Testimony describes DLC's billing practices with respect to
19 supplier charges.³ Based on DLC's discovery responses, he states that DLC does not
20 include any information about the cents per kWh prices charged by suppliers on its bill,
21 only presented the total dollar amount of supplier charges. As a result, customers served
22 by an EGS cannot compare their price to the Price to Compare. Mr. Geller also states that

³ CAUSE-PA St. No. 1, at 53-55.

1 DLC allows suppliers to include non-basic charges in the dollar amount of supplier charges
2 that appears on the DLC bill and that DLC does not presently know what portion, if any,
3 of the supplier charges are non-basic. This information is very troubling. First, no EDC
4 should be allowing suppliers to bill for non-basic charges on the bill. The Purchase of
5 Receivables Program specifically only allows the EDC to bill and collect for basic charges
6 or, in the case of an EGS, generation supply charges.⁴ Second, the EDC cannot threaten
7 or pursue termination of service for non-basic charges even if they are identified separately
8 on the customer bill. I am not aware of any other Pennsylvania EDC that allows suppliers
9 to include non-basic charges on their customer bill, whether identified as such or not. As
10 a result of this information, I add the following recommendations:

- 11 • DLC should take action to ensure that suppliers provide their cents per kWh price in
12 the transmission of their billing information to DLC and DLC should create a method
13 to present this cents per kWh price on the customer bill, perhaps in a text box, or other
14 bill message as soon as possible.
- 15 • DLC should immediately inform all suppliers who have a POR agreement with DLC
16 that the supplier charges submitted for billing by DLC must not include any charges
17 other than the basic generation supply charges.
- 18 • DLC should research the extent to which suppliers have been submitting non-basic
19 charges as part of their charges that appear on the DLC bill and take steps to report on
20 the extent to which this has occurred and recommend steps to provide recompense to

⁴ Duquesne's own Supplier Coordination Tariff states, "The Company will bill price plans offered by the EGS which are based on fixed and variable charges similar to those the Company employs for billing distribution service and default service." And, "Duquesne will purchase the accounts receivable, without recourse, associated with EGS sales of retail electric commodity, comprised of generation and transmission services, to residential customers." Rules and Regulations, Section 12.1.1 and 12.1.7. Effective June 1, 2017.

1 any customer adversely impacted by this practice.

2 Q. MR. KALLAHER SUPPORTS DLC'S PROPOSAL TO INVOLVE ITS THIRD-PARTY
3 ADMINISTRATOR IN SOLICITING CUSTOMER ENROLLMENTS WITH THE SOP.
4 DO YOU AGREE?

5 A. No. Mr. Kallaher's reasoning relies on his apparent assumption that that EDCs with a
6 third-party administrator for their SOP have a higher referral rate and a higher referral-to-
7 enrollment rate than DLC. However, he does not provide any information to support this
8 assumption. Furthermore, as I described in my Direct Testimony, the referral rate and/or
9 enrollment rate is not the proper criteria for determining the proper implementation of SOP,
10 particularly in light of the history of over-selling and promoting the program by third party
11 administrators without regard to the consumer protection disclosures that I have
12 documented in many proceedings. My concern is particularly heightened in this case by
13 the role of DLC's third party administrator in selling DLC's new and moving customers
14 products and services unrelated to DLC by means of a transfer of the DLC call to the third
15 party. The administrator is no doubt receiving a benefit from the vendors that its customer
16 service representatives are promoting, but this "sales" orientation is not appropriate for
17 presenting a neutral and factually correct description of the SOP.

18 Q. DO YOU AGREE WITH MR. KALLAHER'S PROPOSAL TO AUTOMATICALLY
19 ENROLL NEW OR MOVING CUSTOMERS INTO THE SOP?

20 A. No. This proposal would result in slamming new or moving customers into a contract with
21 a supplier that they have not affirmatively agreed with. DLC already automatically
22 presents information about the SOP to these customers after their transaction is completed.
23 Those customers who choose to enroll with an EGS do so with an affirmative agreement.

1 Any other approach would be improper and conflict with all the prior policies and
2 precedent in Pennsylvania.

3 Q. WITH REGARD TO THE CAP SHOPPING PROGRAM, MR. KALLAHER
4 RECOMMENDS THAT AT THE END OF THE CAP CONTRACT THAT THE
5 CUSTOMER REMAIN WITH THE EGS "AT A PROGRAM COMPLIANT PRICE."
6 DO YOU AGREE?

7 A. No. First, I do not understand Mr. Kallaher's "program compliant price." This offer might
8 be the same in terms of the savings offered to the CAP customer in the original contract or
9 it might be a different or lower level of savings compared to the original contract. If the
10 EGS is offering a different pricing term, I recommend that the more appropriate action is
11 to return the customer to default service and allow the CAP customer to sign up with one
12 of the approved EGSs for this program. DLC's proposal to return CAP customers to
13 default service at the end of the contract term with a participating EGS is the reasonable
14 approach to take at this point and allow the CAP customers more experience in shopping
15 and various EGS offers prior to considering Mr. Kallaher's proposal.

16 Q. DO YOU AGREE THAT CAP CUSTOMERS SHOULD BE ALLOWED TO
17 PARTICIPATE IN THE SOP AS MR. KALLAHER RECOMMENDS?

18 A. No. This program is not compliant with the Commission's CAP Shopping program
19 guidelines because there is no guarantee that the customer will be given a price equal to or
20 lower than the Price to Compare during the 12-month term of the SOP contract. The SOP
21 contract starts out with a 7% discount from the current PTC and is fixed for 12 months.
22 This 7% discount could disappear completely or be significantly lower during the 12-
23 month term depending on the movement of the PTC. The SOP is not compliant with a

1 CAP shopping program.

2 Q. DOES THIS COMPLETE YOUR TESTIMONY AT THIS TIME?

3 A. Yes.

294061

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of Default Service Plan for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts set forth in my Rebuttal Testimony, OCA Statement 2-R, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 14, 2020
*294046

Signature: Barbara R. Alexander
Barbara R. Alexander

Consultant Address: Barbara Alexander Consulting, LLC
83 Wedgewood Drive
Winthrop, Maine 04364

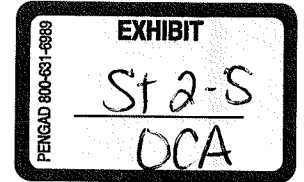
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company :
For Approval of Default Service Plan : Docket No. P-2020-3019522
For the Period :
June 1, 2021 through May 31, 2025 :

SURREBUTTAL TESTIMONY

OF

BARBARA R. ALEXANDER
Barbara Alexander Consulting LLC



ON BEHALF OF THE
OFFICE OF CONSUMER ADVOCATE

August 28, 2020

1 Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

2 A. My name is Barbara R. Alexander. I am the sole member of Barbara Alexander Consulting
3 LLC. My address is 83 Wedgewood Dr., Winthrop, ME 04364. I appear in this case as a
4 witness on behalf of the Pennsylvania Office of Consumer Advocate (OCA).

5 Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS PROCEEDING?

6 A. Yes. I filed Direct Testimony on July 17, 2020 and Rebuttal Testimony on August 14,
7 2020 on behalf of the OCA.

8 A. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

9 A. I am filing Surrebuttal Testimony on behalf of the OCA in response to the Rebuttal
10 Testimony of Christopher H. Kallaher on behalf of Interstate Gas Supply, Inc., Shipley
11 Choice LLC, NRG Energy, Inc., Vistra Energy Corp., Engie Resources LLC, WGL Energy
12 Services, Inc., and Direct Energy Services, LLL (“EGS Parties”).¹ In addition, I am filing
13 Surrebuttal Testimony in response to the Rebuttal Testimony of Katherine Scholl² and
14 David Ogden³ on behalf of Duquesne Light Company (DLC). My Surrebuttal Testimony
15 addresses the DLC Standard Offer Program (SOP) and Customer Assistance Program
16 (CAP) Shopping Program.

17 Q. AS A RESULT OF YOUR REVIEW OF THE EGS PARTIES’ TESTIMONY, DO YOU
18 HAVE ANY CHANGES YOU WISH TO MAKE TO YOUR RECOMMENDATIONS
19 AS SET FORTH IN YOUR DIRECT AND REBUTTAL TESTIMONY?

20 A. There are minor changes, but my recommendations remain as follows:

¹ EGS Parties’ St. No. 1-R.

² DLC St. No. 5-R.

³ DLC St. No. 4-R.

- 1 ▪ I disagree with Duquesne Light Company's (DLC) proposal to change their SOP
2 enrollment process to engage a third-party contractor (AllConnect) to present the
3 program and enroll customers in the program. DLC's current method of implementing
4 the SOP by referring interested customers directly to a participating EGS should
5 continue as it is a reasonable method to implement this program for which there is no
6 evidence that supports any change.
- 7 ▪ Prior to any proposal to implement the SOP in any future DSP, DLC should undertake
8 a survey or focus group with participating SOP customers to determine their opinion
9 of the program and to test their knowledge of the operation of the initial discounted
10 price with the movements in the PTC during the term of the contract. In addition, DLC
11 should explore why customers who are solicited to do so have not enrolled in the
12 program. This survey should also explore customer understanding of the EGS renewal
13 notices and opt-out terms of service that customers may have experienced.
- 14 ▪ DLC should specifically conduct a study of the prices charged by the SOP suppliers
15 after the 12-month fixed price contract for customers who remain with the supplier
16 through the negative option renewal process. The evidence presented by PPL Electric
17 that most customers who remain with the SOP supplier experience significantly higher
18 generation supply prices and bills should be of interest and concern to DLC. Based on
19 this review DLC should consider a program rule that would return customers to default
20 service at the end of the SOP contract, thus allowing customers to choose any EGS or
21 re-enter the SOP.
- 22 ▪ DLC currently does not allow Customer Assistance Program (CAP) customers to enroll
23 with an EGS, and this policy is applicable as well with the SOP. DLC has proposed a

1 CAP Shopping Program that complies with the Commission's guidelines and requires
2 that any EGS that participates in this program must ensure that CAP customers do not
3 pay more than the applicable Price to Compare (PTC) during the entire term of the EGS
4 contract. This program should be implemented, if at all, with the conditions identified
5 in my Direct Testimony, namely:

- 6 ○ This program must be accompanied by robust and well-designed customer
7 education materials to CAP customers about this new ability to shop and select an
8 EGS. However, DLC has not submitted any of the materials or details about its
9 promised educational program. As a result, it is difficult to agree with a program
10 that will require careful and well-designed educational materials that, as I
11 recommend, should include a customer feedback mechanism to ensure that CAP
12 customers understand this program and the consumer protections associated with it.
13 I recommend that DLC be required to develop and share its customer educational
14 materials and the means by which it will conduct ongoing research associated with
15 the measurement of success of this program with stakeholders prior to the program's
16 implementation and that stakeholders have the ability to bring disputes and issues
17 of policy and content to the Commission for resolution. The alternative is to allow
18 DLC to implement this program without sufficient oversight.
- 19 ○ DLC should be allowed to propose revisions to or halt the CAP Shopping Program
20 if the number of participating suppliers drops below 5 over a substantial period of
21 time.
- 22 ○ DLC proposes that the capital costs to implement the CAP shopping program be
23 recovered from customers in a future base rate case. I question whether this is

1 appropriate. Given DLC's proposal that the program costs will not be incurred until
2 at least five EGSs sign up to implement this program and solicit CAP customer
3 enrollments, it would be a proper incentive to impose those implementation costs
4 on EGSs as a means of testing their commitment to actually participate in the
5 program for a given period of time. Otherwise, the potential that DLC will incur
6 costs that it seeks to impose on ratepayers if most or all of the EGSs drop out of the
7 program within a year or two is a realistic one, resulting in increased risks for
8 ratepayers. Any EGS commitment must include a sufficient period of time to justify
9 the expense of this program.

- 10 ○ I object to recovery of any of the costs for this program via the Universal Service
11 Charge. If there are educational expenses associated with this program, such costs
12 could be reasonably recovered in the Customer Education Charge (as proposed by
13 PECO Energy). But, the costs for this program should not add to the ratepayer
14 support for the Universal Service programs. In addition, similar to my
15 recommendation for the recovery of the capital costs for implementation of this
16 program, some portion of the costs should be required to be funded by the EGSs to
17 test their commitment to actually participate in the CAP Shopping Program.

18 Q. DID YOU HAVE ADDITIONAL RECOMMENDATIONS ON DLC'S BILLING
19 PRACTICES FOR SUPPLIER CHARGES?

20 A. Yes. After my review of DLC's Rebuttal Testimony in response to Mr. Geller's Direct
21 Testimony on behalf of CAUSE-PA and my Rebuttal Testimony on this issue, I add the
22 following recommendations:

- 23 • DLC should take action to ensure that suppliers provide their cents per kWh price in

1 the transmission of their billing information to DLC and DLC should create a method
2 to present the supplier's current monthly cents per kWh price on the customer bill,
3 perhaps in a text box, or other bill message as soon as possible. It appears that DLC is
4 redesigning its bill to allow suppliers to provide more detailed pricing information, but
5 there does not appear to be a requirement that suppliers provide this information that is
6 crucial to allow customers to compare the supplier price with the Price to Compare.

- 7 • DLC should immediately inform all suppliers who have a POR agreement with DLC
8 that the supplier charges submitted for billing by DLC must not include any charges
9 other than the basic generation supply charges. I agree with DLC's proposed
10 amendment to its Supplier Tariff that allows DLC to require suppliers to certify that
11 their charges submitted pursuant to the POR do not include non-basic charges.
- 12 • DLC should research the extent to which suppliers have been submitting non-basic
13 charges as part of their charges that appear on the DLC bill and take steps to report on
14 the extent to which this has occurred and recommend steps to provide recompense to
15 any customer adversely impacted by this practice.

16 Q. ADDRESSING MR. KALLAHER'S TESTIMONY ON BEHALF OF THE EGS
17 PARTIES, DID HE PRESENT ANY NEW EVIDENCE OR FACTUAL INFORMATION
18 IN SUPPORT OF HIS POSITIONS?

19 A. No. Mr. Kallaher's Rebuttal Testimony is primarily a repetition of his prior statements.
20 The primary basis for his proposals is that the default service program in Pennsylvania is
21 defective and that it is not fair or reasonable for either customers or regulators to compare
22 supplier prices with the Price to Compare. Not only are his complaints unfair and unjust,
23 they conflict with the statutory and regulatory directives that have governed default service

1 and the competitive procurement of default service in the wholesale market and the
2 customer education programs mandated by the Commission since 2012. However, he
3 makes one novel argument that deserves formal response.

4 Q. MR. KALLAHER STATES THAT IT WOULD BE IMPROPER AND CONSTITUTE A
5 “REGULATION” OF SUPPLIER PRICES IF A COMPARISON OF SUPPLIERS
6 PRICES TO THE PTC WAS CONDUCTED. DO YOU AGREE?

7 A. Of course not. Mr. Kallaher’s statement is made in response to my testimony that
8 recommended that Duquesne conduct a study to compare the prices charged by suppliers
9 at the end of the SOP contracts with default service, specifically considering the prices
10 charged by suppliers pursuant to their negative option renewal policies. He claims that any
11 study by the Commission that compares supplier prices with default service prices could
12 not then take subsequent action “without exceeding the Commission’s authority to regulate
13 EGS prices.”⁴

14 Mr. Kallaher’s statement is belied by the history of restructuring and the adoption
15 of default service and licensing policies in every restructuring state (with the exception of
16 Texas). Restructuring states have adopted a policy of ensuring that residential customers
17 have access to a stable and fixed price default service. This service is purchased through a
18 competitive bidding process supervised by a neutral third party with the acquisition of a
19 laddered set of contracts from wholesale market suppliers. Similarly, these states have
20 required electric distribution companies to identify this default service price either on their
21 customer bills or in widely disseminated customer education materials. Customers have

⁴ EGS Parties’ St. No. 1-R, page 7, lines 11-13.

1 been taught for many years to compare the price offered by the supplier with the default
2 service price and most states, similar to Pennsylvania, maintain a web portal that lists the
3 default service price and compares that price to supplier offers. Suppliers are free to offer
4 time of use prices, one-time gift cards, fixed prices, variable prices, or even fixed bill
5 amounts. However, customers are urged to compare the supplier bill to the default service
6 bill as well as other attributes that the supplier may offer. Finally, there are reams of studies
7 that have been done, some by Commissions and some by public advocates, that compare
8 supplier bills and prices to default service bills and prices. I attach a list of those studies
9 as Exhibit BA-2. Many states have taken actions directly in response to such information,
10 including the New York Commission's prohibition on charging more than default service
11 to low income customers, Connecticut's ban on the retail sale of generation supply to low
12 income customers, and the ongoing reforms of consumer protection regulations in
13 Maryland, Maine, and Massachusetts. Indeed, the Pennsylvania Commission has cited to
14 the similar studies conducted in DSP proceedings in its analysis of the impact of CAP
15 shopping on CAP customers and other customer bills in its CAP Shopping Program
16 Guidelines.⁵ Mr. Kallaher's suggestion that even comparing supplier prices with default
17 service prices or comparing supplier bills with default service bills in order to develop
18 proper consumer protection and regulatory policies is somehow an improper "regulation"
19 of these prices is simply incorrect.

20 Q. HOW DO YOU RESPOND TO MS. SCHOLL'S REBUTTAL TESTIMONY

⁵ The Commission has cited to the studies done by CAUSE-PA in its consideration of the CAP shopping program guidelines. *Proposed Policy Statement Order*, Docket No. M-2018-3006578 (Order Entered on February 28, 2019).

1 CONCERNING HOW THE INCREASED COSTS OF THE SOP PROGRAM WILL BE
2 RECOVERED?

3 A. I understand the DLC proposal to charge suppliers participating in the SOP a \$30 fee for
4 each referral to DLC's third party contractor, AllConnect. I agree that it is appropriate to
5 charge suppliers for any increased costs for the SOP.

6 Q. DOES THIS CLARIFICATION SOLVE YOUR CONCERNS WITH DLC'S
7 PROPOSAL TO REFER CUSTOMERS TO ALLCONNECT AS PART OF THE SOP?

8 A. No. I continue to disagree with this proposal and urge the Commission to reject this change
9 in DLC's SOP. Ms. Scholl's basis for making this change is not supported by any evidence
10 that the current DLC program is not working properly. I submitted evidence in my Direct
11 Testimony based on listening to actual DLC calls with customers and in almost every case
12 the proper presentation of the SOP was made to customers, but all but one customer
13 declined interest in the program. The customer's reaction to the DLC presentation was not
14 based on the inadequate explanation of the program. Nor did customers appear to seek
15 additional information. Rather, the customers were simply not interested in shopping with
16 a supplier. Ms. Scholl appears to think the lack of customer interest in the program or lack
17 of "referrals" and "enrollments" is due to the DLC's inability to market and promote the
18 program. I disagree. Furthermore, her testimony fails to respond to my evidence that
19 relying on AllConnect or any third party administrator has consistently resulted in "over
20 selling" and promoting this program by failing to give a neutral and educational
21 explanation of the program by these agents. I have documented these concerns in
22 FirstEnergy EDCs, PECO Energy and PPL Electric DSP proceedings for many years and
23 in my review of these customer call recordings in the pending DSP proceedings for PPL

1 Electric and PECO Energy. Overall, I conclude that pursuing a referral to a third party
2 agent accompanied by a fee paid to that agent is akin to a supplier hiring a telemarketing
3 sales agent to pursue marketing and sales on behalf of the supplier, with the obvious and
4 repeated pattern of creating an incentive to make a sale due to the compensation structure
5 for the agent. This is not a necessary or proper role for an EDC whose obligation is to
6 present an educational and neutral description of the SOP.

7 Q. WHAT ABOUT THE REVISED SCRIPTS PRESENTED BY MS. SHOLL THAT WILL
8 GOVERN THEIR RELATIONSHIP WITH ALLCONNECT?

9 A. The revised scripts⁶ do not comply with the Commission's recommendations. The very
10 first sentence in Ms. Scholl's proposed script for AllConnect is, "As a customer of
11 Duquesne Light, I am pleased to offer you an opportunity to save money on the electricity
12 portion of your utility bill." This introductory sentence does not appear in the
13 Commission's approved script language I quoted in my Direct Testimony. Furthermore,
14 the "opportunity to save money" is intended to suggest that the customer will save money
15 and that is not a guaranteed feature of this program.

16 More importantly, Ms. Scholl ignores the basis for my concern after listening for
17 many years to multiple versions of the scripts and the calls between EDC third party agents
18 presenting the SOP and the customers, many of which reflect AllConnect agents. The
19 agents do not always read the scripts entirely but if they do, the script is read in a rapid and
20 sometimes unintelligible manner. Rather, the "sale" consists of a dialogue in which the
21 agent describes the beneficial features of the program and often fails to repeat the

⁶ DLC Statement No. 5-R, Exhibit KMS-2R.

1 educational or cautionary aspects of the program. The agents seek to overcome customer
2 concerns and often pressure the customer into accepting a “discount” and “savings” on
3 their bill without any of the details that are reflected in the formal script. In short, it is
4 typically not an educational conversation, but a sales and promotional call that seeks to
5 overcome customer hesitancy.

6 Q. BUT WHAT ABOUT MS. SCHOLL’S OFFER TO CONDUCT OVERSIGHT OF
7 ALLCONNECTS CALLS WITH DLC CUSTOMERS?

8 A. This is a typical response by EDCs to this issue. However, that oversight will require more
9 time and expense by DLC that she ignores in her presentation of this proposed change to
10 the SOP. The fact that DLC appears willing to pay for increased oversight and monitoring
11 of AllConnect without apparent concern about the level of these costs or how those costs
12 will be recovered is not reasonable in light of her refusal to incur any costs for customer
13 oriented surveys about the SOP or the prices charged by suppliers after the SOP contract.

14 Q. DO YOU AGREE WITH THE APPARENT OBJECTIVE OF THE PROPOSED
15 CHANGE TO THE SOP TO ENROLL MORE CUSTOMERS WITH SUPPLIERS?

16 Q. No. Ms. Scholl’s repeated presentation of higher referral and enrollment rates by
17 FirstEnergy (whose current program has not been reviewed since it was reformed in 2018-
18 2019) and PPL Electric suggests that DLC’s main objective is to get more customers
19 enrolled with suppliers. That should not be the basis for any reforms to the SOP. Rather,
20 if there is evidence that the DLC representatives have not properly presented the program
21 or that the presentation is not understood by customers, that would be appropriate for
22 consideration of reforms. However, there is no basis for such evidence and I have
23 presented evidence that confirms that the program is being presented in a fair manner and

1 that customers simply are not interested.

2 Q. DOES MS. SCHOLL'S REVISED VERSION OF THE TRANSFER LANGUAGE
3 FROM DLC TO ALLCONNECT RESPOND TO YOUR CONCERNS?

4 A. No. The revised language only eliminates the notion that the transfer is linked to the DLC
5 transaction (by eliminating the "verify" language).⁷ However, the revised language does
6 not ask the customer for permission or to agree to the transfer to AllConnect. AllConnect
7 has a contract with DLC to market and sell non-utility optional services to DLC's
8 customers.⁸ There is no essential utility service justification for what appears to be an
9 involuntary transfer of the DLC customer to this marketer. As a result, the revised language
10 is not appropriate even without linking the transfer to the SOP, but certainly improper if
11 the SOP referral to AllConnect is adopted. Customers should be explicitly asked to agree
12 to the transfer and the reason for the transfer should be explicitly stated. For example, the
13 following script would be appropriate for the current contract with AllConnect: "We have
14 completed your transaction with Duquesne Light. Do you agree with a transfer of this call
15 to our agent who will offer you optional services with your new location?" I note that this
16 issue of requiring an agreement by the customer to a transfer of their call was specifically
17 addressed by the Commission in its adoption of the scripts used by FirstEnergy and issued
18 as approved examples to all the EDCs as I described in detail in my Direct Testimony.

19 Q. DO YOU FIND MS. SCHOLL'S REASONS FOR REJECTING YOUR PROPOSALS
20 TO CONDUCT A STUDY OF CUSTOMER UNDERSTANDING OF THE SOP AND

⁷ DLC St. No. 5-R, page 14, lines 4-6. She proposes that the revised script state: "I am now going to transfer you to Allconnect to ~~verify your service with Duquesne and~~ present you with additional **optional** services."

⁸ DLC Response to OCA-V-5. DLC confirms that these non-utility services are not billed to customers via the DLC bill.

1 AN ANALYSIS OF PRICES CHARGED BY SOP SUPPLIERS PURSUANT TO THEIR
2 NEGATIVE OPTION RENEWAL POLICIES PROBATIVE?

3 A. No. I am somewhat surprised that Duquesne would not want to monitor the actual
4 implementation of the SOP by conducting a simple study of customer understanding of the
5 program and their opinion concerning participation in the program. Nor do I agree with
6 DLC's apparent willingness to not be knowledgeable of the prices that may result in
7 customer complaints to DLC about DLC's collection actions, including termination of
8 service, for nonpayment of bills that contain significantly higher supplier prices that were
9 charged as a result of the customer's enrollment in the SOP promoted by DLC. While Ms.
10 Scholl raises the barrier of costs and cost recovery for such studies in her testimony, she
11 did not provide any cost estimates. Pursuant to discovery, DLC now estimates that the cost
12 of conducting an analysis of prices charged by suppliers after the SOP contract term is
13 \$7,600⁹ and the cost of conducting a customer survey concerning their understanding of
14 and opinion of the SOP is \$10,000-\$15,000.¹⁰ These costs are relatively minor and should
15 not be a barrier to conducting these analyses.

16 Q. IS THERE ANY COMMISSION DIRECTIVE ABOUT THE SOP THAT WOULD
17 PREVENT SUCH STUDIES OR SUGGEST THAT SUCH STUDIES SHOULD NOT BE
18 UNDERTAKEN?

19 A. No. The Commission issued its initial directives on the SOP in 2012. It is unlikely that
20 the Commission would not be interested in the customer understanding of this program or
21 how suppliers have handled their negative option renewal policies for SOP customers in

⁹ DLC Response to OCA-V-1.

¹⁰ DLC Response to OCA-V-2.

1 the 7-8 years since the program was initiated. Turning a blind eye to this information is
2 not a reasonable approach.

3 Q. HOW DOES MS. SCHOLL REACT TO THE CONCERNS RAISED BY CAUSE-PA
4 AND YOUR REBUTTAL TESTIMONY ON THE LACK OF BILLING
5 INFORMATION FOR DLC CUSTOMERS CONCERNING SUPPLIER AND
6 DEFAULT SERVICE PRICES?

7 A. DLC uses a “bill ready” billing format. Supplier charges are presented in a single dollar
8 amount and without the actual cents per kWh for generation supply that are disclosed by
9 suppliers to their customers at the time of enrollment. Ms. Scholl states that DLC
10 recognizes this issue and that a bill redesign is planned for November 2020. However, she
11 states that DLC does not intend to require suppliers to state their cents per kWh price on
12 DLC bills but will do so if suppliers voluntarily agree to provide such information.¹¹ I do
13 not agree with this policy. Such a policy eviscerates the customer education promoted by
14 the Commission for many years—to compare the supplier price with the PTC and to
15 emphasize that the supplier’s price per kWh must be provided to customers in a disclosure
16 document prior to enrollment.¹² Her concern about supplier prices that may not be
17 amenable to a single cents per kWh price does not reflect the Commission’s clear directives
18 that suppliers must provide a cents per kWh price to their prospective customers, even if
19 this cents per kWh is blended to reflect time of use or other means of the rate design of a
20 supplier’s price. Furthermore, if any supplier seeks to offer a time of use rate option and

¹¹ DLC Response to OCA-V-3 confirms that the redesigned bill will “allow” suppliers to provide price information.

¹² 52 Pa. Code Sec. 54.5 (c). See, e.g., Electric Generation Supplier Contract Summary (Attachment A) to Rulemaking Regarding Electricity Generation Customer Choice, Final Rulemaking Order, Docket L-2017-2628991 (February 27, 2020).

1 cannot present the prices for each time period in this rate option, the entire purpose of
2 sending a price signal to the customer that varies by time of day is thwarted. Suppliers
3 should issue their own bills to time of use customers or engage the distribution company
4 to present their time of use rate structure and bill calculation on the EDC bill at cost.
5 Finally, DLC's customer choice website emphasizes the comparison of the PTC to the
6 supplier's price offering (as well as other attributes).¹³ To promote the comparison of the
7 supplier's price with the PTC and then not require that suppliers provide a cents per kWh
8 price on the customer bill thwarts the point of the comparison. This comparison is
9 particularly important when the supplier's contract calls for an introductory price followed
10 by a variable price that changes monthly and when a customer is moved into a new price
11 with the supplier based on a negative option renewal notice.

12 Q. DO YOU AGREE WITH DUQUESNE'S RESPONSE TO THE CONCERN THAT
13 SUPPLIER CHARGES THAT APPEAR ON THE DLC BILL MIGHT CONTAIN NON-
14 BASIC CHARGES?

15 Q. Ms. Scholl recognizes that DLC is not allowed to bill and collect non-basic supplier charges
16 pursuant to DLC's Purchase of Receivables program and Supplier Coordination Tariff.
17 The response is to include new language in this tariff that allows DLC to request a
18 certification from the supplier that the charges do not include non-basic service.¹⁴ A more
19 obvious and initial recommendation is that DLC immediately issue a notice to all suppliers
20 approved in their POR program that the suppliers must not include any non-basic charges
21 and to notify DLC if such charges have been included in their supplier charges in the recent

¹³ <https://duquesnelight.com/service-reliability/customer-choice>

¹⁴ DLC St. No. 4-R, Exhibit DBO-4R.

1 past, with information on the customers impacted and dollar amount of such charges. DLC
2 should require suppliers to refund those charges to the affected customers and, if such
3 refund is refused, report this information to the Commission for further action. DLC's
4 apparent desire to not address this potential situation is not reasonable.

5 Q. TURNING TO THE REBUTTAL TESTIMONY OF DAVID OGDEN, HE REJECTS
6 YOUR CONCERNS WITH THE RECOVERY OF CAP SHOPPING
7 IMPLEMENTATION COSTS. DO YOU AGREE WITH HIS REASONING?

8 A. No. He claims that the only way to recover capital costs incurred to implement the CAP
9 shopping program is through base rates. That is of course not correct. DLC can recover
10 these costs, similar to those incurred to implement the POR program, through a series of
11 charges to participating suppliers. Such an approach did not apparently discourage
12 suppliers from participating in the program that allowed suppliers to gain access to the
13 EDC bill and EDC collection methods for their unregulated contract prices. With regard
14 to the O&M costs associated with the CAP shopping program, the proposal to recover these
15 costs from the Universal Service Charge (recovery of CAP costs) is not appropriate since
16 these costs are being incurred to implement the retail competition program and not directly
17 required to implement the CAP program. Therefore, DLC should recover these costs in a
18 small fee charged to participating suppliers based on an annual evaluation of the actual
19 costs incurred by DLC. Another option is to include these costs in the Customer Education
20 program cost recovery mechanism.

21 Q. DOES THIS COMPLETE YOUR TESTIMONY AT THIS TIME?

22 A. Yes

Exhibit BA-4

OCA STATEMENT NO. 2-S, EXHIBIT BA-4

EXAMPLES OF PUBLIC STUDIES COMPARING SUPPLIER PRICES TO DEFAULT SERVICE

Connecticut Office of Consumer Counsel ("OCC") Press Release *Time To End the Third-Party Residential Electric Supply Market (Feb. 4, 2019)*, available at https://www.ct.gov/occ/lib/occ/2-4-19_press_release.pdf

See also, <https://portal.ct.gov/-/media/OCC/Fact-sheet-electric-supplier-market-April-2020.docx>

Illinois Commerce Commission, *Office of Retail Market Development ("ORMD") 2018 Annual Report*, at 27-32 (June 29, 2018) (providing a breakdown of how residential customers who sign up with an Alternative Retail Electric Supplier ("ARES") fare in Illinois), available at <https://www.icc.illinois.gov/reports/report.aspx?rt=22>.

Maine Public Utilities Commission, Report on Competitive Electricity Provider and Standard Offer Price Comparisons (Feb. 2018).

Susan M. Baldwin and Sarah M. Bosley, on behalf of the Maryland Office of People's Counsel. Maryland's Residential Electric and Gas Supply Markets: Where Do We Go from Here? (Nov. 2018), available at <http://opc.maryland.gov/Portals/0/Hot%20Topics/Maryland%20Electric%20and%20Gas%20Residential%20Supply%20Report%20November%202018.pdf>.

Massachusetts Attorney General's Office, *Are Consumers Benefiting from Competition? An Analysis of the Individual Residential Electric Supply Market in Massachusetts* (March 2018); Available at: *Are Consumers Benefiting from Competition? An Analysis of the Individual Residential Electric Supply Market in Massachusetts; Massachusetts Attorney General's Office, 2019 Supplemental Report*. See, also, "Suppliers Are Not Providing Value to Individual, Residential Customers," presentation to the New England Restructuring Roundtable, Rebecca Tepper, Chief, Energy and Telecommunications Division, Massachusetts Office of the Attorney General, October 12, 2018. Available at: <http://www.raabassociates.org/main/roundtable.asp?sel=147>

State of New York Public Service Commission, *In the Matter of Eligibility Criteria for Energy Service Companies*, Case 15-M-0127, et al., Initial Brief of the New York Department of Public Service Staff, at 2 (March 30, 2018).
<http://www3.dps.ny.gov/W/PSCWeb.nsf/All/4759ECEE7586F24B85257687006F396E?OpenDocument>

State of Rhode Island, Division of Public Utilities & Carriers ("DPUC"), Press Release: DPUC Enacts New Rules for Competitive Electricity Suppliers, Initiates Review of Competitive Supply Marketplace (May 8, 2018).

Makhijani, Arjun and Peltier, Laurel, *Dysfunctional Residential Third-Party Energy Supply Market*, December 2018, available at https://www.abell.org/sites/default/files/files/Third%20Party%20Energy%20Report_final%20for%20web.pdf

N.Y. Public Service Commission, Case Nos. 12-M-0476, 98-M-1343, 06-M-0647, and 98-M-0667, *Order Adopting a Prohibition of Service to Low-Income Customers by Energy Service Companies* (Dec. 16, 2016), at [http://www3.dps.ny.gov/W/AskPSC.nsf/96f0fec0b45a3c6485257688006a701a/9398a8fe616603ce85258243006e4b99/\\$FILE/Order%20Adopting%20a%20Prohibition%20on%20Service%20to%20Low-Income%20Customers%20by%20Energy%20Service%20Companies.pdf](http://www3.dps.ny.gov/W/AskPSC.nsf/96f0fec0b45a3c6485257688006a701a/9398a8fe616603ce85258243006e4b99/$FILE/Order%20Adopting%20a%20Prohibition%20on%20Service%20to%20Low-Income%20Customers%20by%20Energy%20Service%20Companies.pdf)

Motion of Commissioner David W. Sweet, Pennsylvania PUC, Electric Distribution Company Default Service Plans—Customer Assistance Program Shopping, Public Meeting, December 20, 2018, <http://www.puc.state.pa.us//pcdocs/1599226.pdf>

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of Default Service Plan for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts set forth in my Surrebuttal Testimony, OCA Statement 2-SR, are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 28, 2020
*294955

Signature: _____



Barbara R. Alexander

Consultant Address: Barbara Alexander Consulting, LLC
83 Wedgewood Drive
Winthrop, Maine 04364

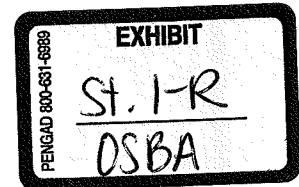
OSBA STATEMENT NO. 1-R

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition of Duquesne Light Company for :
Approval of Default Service Plan for the : Docket No. P-2020-3019522
Period June 1, 2021 through May 31, 2025 :**

Rebuttal Testimony of

BRIAN KALCIC



On Behalf of the

Pennsylvania Office of Small Business Advocate

Date Served: August 14, 2020

Date Submitted for the Record: _____

Rebuttal Testimony of Brian Kalcic

1 **Q. Please state your name and business address.**

2 A. Brian Kalcic, 225 S. Meramec Avenue, St. Louis, Missouri 63105.

3

4 **Q. What is your occupation?**

5 A. I am an economist and consultant in the field of public utility regulation, and
6 principal of Excel Consulting. My qualifications are described in the Appendix to
7 this testimony.

8

9 **Q. On whose behalf are you testifying in this case?**

10 A. I am testifying on behalf of the Office of Small Business Advocate (“OSBA”),
11 which is representing the small business customers served by Duquesne Light
12 Company (“Duquesne” or the “Company”).

13

14 **Q. Did you previously submit direct testimony in this proceeding?**

15 A. No, I did not.

16

17 **Q. What is the subject of your rebuttal testimony?**

18 A. I will respond to certain positions sponsored in the direct testimony of the following
19 witnesses: a) Mr. Christopher H. Kallaher on behalf of the Electric Generation
20 Supplier (“EGS”) parties; and b) Mr. Harry Gellar on behalf of the Coalition for
21 Affordable Utility Services and Energy Efficiency in Pennsylvania (“CAUSE-PA”).

22

1 **EGS Witness Kallaher**

2 **Q. Beginning on page 15 of his direct testimony, Mr. Kallaher discusses**
3 **Duquesne’s current practice of placing new and moving customers on default**
4 **service, unless the customer elects to take service from an EGS. Mr. Kallaher**
5 **argues that such practice puts EGSs at a competitive disadvantage. In order to**
6 **mitigate this concern, Mr. Kallaher recommends that all new or moving**
7 **customers calling to initiate service be automatically enrolled in Duquesne’s**
8 **SOP. Do you agree?**

9 **A. No.** At present, new or moving customers may elect to participate in Duquesne’s
10 SOP, which offers a 7% discount off the Company’s then current price to compare
11 (“PTC”). While the customer’s SOP rate is fixed for a twelve-month period,
12 Duquesne’s applicable PTC is not. As a result, the SOP customer must monitor
13 changes in Duquesne’s PTC and, if necessary, switch back to default service, in
14 order to ensure that the SOP continues to offer the cheaper rate.

15 While customers that *elect* to participate in Duquesne’s SOP may arguably
16 be assumed to understand the risk their choice entails, it would be negligent to
17 presume new customers that are automatically enrolled in the program understand
18 such risks. In the end, no customer should be enrolled in Duquesne’s SOP unless
19 the customer elects to participate in the program.

20
21 **Q. On pages 26-34 of his direct testimony, Mr. Kallaher discusses his proposal**
22 **regarding the recovery of Network Integration Transmission Services**

1 **(“NITS”) charges in Duquesne’s service territory. In Mr. Kallaher’s view,**
2 **NITS charges are unpredictable and necessitate that EGSs include risk**
3 **premiums in their fixed-price offers. In order to mitigate the negative impact**
4 **of fluctuations in NITS charges on EGS service offerings, Mr. Kallaher**
5 **recommends that Duquesne treat NITS charges as non-market based and**
6 **recover such charges on behalf of all distribution customers (i.e., not just**
7 **default service customers) via a non-bypassable charge. Do you agree?**

8 A. No. Under Mr. Kallaher’s proposal, until such time as their current EGS contracts
9 expire, shopping customers would be at risk of paying twice for NITS services –
10 once as part of their EGS bill and a second time when paying the non-bypassable
11 charge. As such, the Commission should reject Mr. Kallaher’s proposal to shift
12 responsibility for the recovery of NITS charges from EGSs to Duquesne.

13
14 **CAUSE-PA Witness Gellar**

15 **Q. Beginning on page 23 of his direct testimony, Mr. Gellar discusses whether**
16 **Duquesne’s proposal to make CAP customers ineligible to choose the EV-TOU**
17 **rate is sufficient to protect economically and medically vulnerable customers**
18 **from the potentially higher bills that may result from TOU rates. Mr. Gellar**
19 **concludes that Duquesne should implement additional protections for all**
20 **confirmed low income and medically vulnerable customers. In particular, Mr.**
21 **Gellar recommends that Duquesne conduct additional customer outreach**
22 **concerning available universal service programs and, if necessary, prepare**

1 **individualized TOU bill impact assessments for vulnerable customers that still**
2 **wish to choose the EV-TOU rate option. Do you have any comment?**

3 A. Yes. Mr. Gellar does not provide an estimate of the cost of implementing his
4 proposals. However, if Mr. Gellar's recommendations are adopted, the costs
5 associated with additional residential customer outreach and individualized bill
6 assessments will necessarily cause Duquesne's projected EV-TOU implementation
7 costs to increase.

8 The OSBA takes no position regarding whether Mr. Gellar's proposals are
9 reasonable and/or appropriate as long as all of the incremental customer outreach
10 and assessment costs associated with his proposals are directly assigned to, and
11 recovered from, the residential procurement class.

12

13 **Q. Does this conclude your rebuttal testimony?**

14 A. Yes.

APPENDIX

APPENDIX

Qualifications of Brian Kalcic

Mr. Kalcic graduated from Benedictine University with a Bachelor of Arts degree in Economics in December 1974. In May 1977 he received a Master of Arts degree in Economics from Washington University, St. Louis. In addition, he has completed all course requirements at Washington University for a Ph.D. in Economics.

From 1977 to 1982, Mr. Kalcic taught courses in economics at both Washington University and Webster University, including Microeconomic and Macroeconomic Theory, Labor Economics and Public Finance.

During 1980 and 1981, Mr. Kalcic was a consultant to the Equal Employment Opportunity Commission, St. Louis District Office. His responsibilities included data collection and organization, statistical analysis and trial testimony.

From 1982 to 1996, Mr. Kalcic was employed by the firm of Cook, Eisdorfer & Associates, Inc. During that time, he participated in the analysis of electric, gas and water utility rate case filings. His primary responsibilities included cost-of-service and economic analysis, model building, and statistical analysis.

In March 1996, Mr. Kalcic founded Excel Consulting, a consulting practice that offers business and regulatory analysis.

Mr. Kalcic has previously testified before the state regulatory commissions of Delaware, Indiana, Kansas, Kentucky, Maine, Massachusetts, Minnesota, Missouri, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Texas, and also before the Bonneville Power Administration.

Petition of Duquesne Light Company for Approval of Default Service Plan
 June 1, 2021 through May 31, 2025
 P-2020-3019522

Duquesne Light Company

Testimony and Exhibits to Be Offered Into Evidence

<u>Witness</u>	<u>Statement</u>	<u>Exhibits</u>
C. James Davis	<ul style="list-style-type: none"> • Direct Testimony Statement No. 1 	<ul style="list-style-type: none"> • Hearing Exhibit 1 - <i>Petition of Duquesne Light Company for Approval of Default Service Plan</i>
	<ul style="list-style-type: none"> • Rebuttal Testimony Statement No. 1-R 	<ul style="list-style-type: none"> • Exhibit CJD-1R
	<ul style="list-style-type: none"> • Rejoinder Testimony Statement No. 1-RJ 	
John A. Peoples	<ul style="list-style-type: none"> • Direct Testimony Statement No. 2 	<ul style="list-style-type: none"> • Exhibit JP-1 • Exhibit JP-2 • Exhibit JP-3
	<ul style="list-style-type: none"> • Rebuttal Testimony Statement No. 2-R 	
Scott G. Fisher	<ul style="list-style-type: none"> • Direct Testimony Statement No. 3 	
	<ul style="list-style-type: none"> • Rebuttal Testimony Statement No. 3-R 	<ul style="list-style-type: none"> • Exhibit SGF-1R • Exhibit SGF-2R • Exhibit SGR-3R
	<ul style="list-style-type: none"> • Rejoinder Testimony Statement No. 3-RJ 	
David B. Odgen	<ul style="list-style-type: none"> • Direct Testimony Statement No. 4 	<ul style="list-style-type: none"> • Exhibit DBO-1 • Exhibit DBO-2 • Exhibit DBO-3 • Exhibit DBO-4 • Exhibit DBO-5 • Exhibit DBO-6 • Exhibit DBO-7 • Exhibit DBO-8 • Exhibit DBO-9 • Exhibit DBO-10
	<ul style="list-style-type: none"> • Rebuttal Testimony Statement No. 4-R 	<ul style="list-style-type: none"> • Exhibit DBO-1R • Exhibit DBO-2R • Exhibit DBO- 3R • Exhibit DBO-4R

Petition of Duquesne Light Company for Approval of Default Service Plan
June 1, 2021 through May 31, 2025
P-2020-3019522

Katherine M. Scholl	<ul style="list-style-type: none">• Direct Testimony Statement No. 5	<ul style="list-style-type: none">• Exhibit KMS-1• Exhibit KMS-2
	<ul style="list-style-type: none">• Rebuttal Testimony Statement No. 5-R	<ul style="list-style-type: none">• Exhibit KMS-1R• Exhibit KMS-2R
	<ul style="list-style-type: none">• Surrebuttal Testimony Statement No. 5-SR	
	<ul style="list-style-type: none">• Rejoinder Testimony Statement No. 5-RJ	

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company	:	
For Approval of Default Service Plan	:	P-2020-3019522
For the Period June 1, 2021	:	
Through May 31, 2025	:	

**OFFICE OF CONSUMER ADVOCATE
LIST OF TESTIMONY AND EXHIBITS TO BE ADMITTED INTO THE RECORD**

1. OCA St. No. 1 – Direct Testimony of Serhan Ogur w/ Appendix A
2. OCA St. No. 2 – Direct Testimony of Barbara R. Alexander w/Exhs. BA-1, 2 and 3
3. OCA St. No. 1R – Rebuttal Testimony of Serhan Ogur
4. OCA St. No. 2R – Rebuttal Testimony of Barbara R. Alexander
5. OCA St. No. 1S – Surrebuttal Testimony of Serhan Ogur
6. OCA St. No. 2S – Surrebuttal Testimony of Barbara R. Alexander w/Exh. BA-4

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company :
For Approval of Default Service Plan : **Docket No. P-2020-3019522**
for the Period June 1, 2021 through :
May 31, 2025 :

OFFICE OF SMALL BUSINESS ADVOCATE
LIST OF EVIDENCE TO BE ADMITTED INTO THE RECORD

- Rebuttal Testimony of Brian Kalcic, labeled OSBA Statement No. 1-R

DATE: 09/04/20

/s/ Sharon E. Webb

Sharon E. Webb
Assistant Small Business Advocate
Attorney ID No. 73995

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Petition of Duquesne Light Company for :
Approval of a Default Service Program for the : Docket No. P-2020-3019522
Period of June 1, 2021 through May 31, 2025 :

**PREPARED HEARING EXHIBIT LIST OF THE COALITION FOR AFFORDABLE
UTILITY SERVICES AND ENERGY EFFICIENCY IN PENNSYLVANIA**

CAUSE-PA intends to move for the admission of the following evidence into the record at the September 9, 2020 hearing in the above captioned matter:

- **CAUSE-PA Statement 1, the Direct Testimony of Harry S. Geller**
 - 60 pages of written testimony
 - CAUSE-PA Exhibit 1: Residential Shopping
 - CAUSE-PA Exhibit 2: Confirmed Low Income Shopping
 - CAUSE-PA Exhibit 3: Energy Assistance Summary (EASUM)
 - CAUSE-PA Exhibit 4: LIHEAP Vendor Agreement - Utility
 - Appendix A: Resume of Harry S. Geller
 - Appendix B: Cited Responses to Interrogatories

- **CAUSE-PA Statement 1-R, the Rebuttal Testimony of Harry S. Geller**
 - 12 pages of written testimony
 - Appendix A: Joint Comments of CAUSE-PA et al., Docket M-2018-2645254
 - Appendix B: Joint Reply Comments of CAUSE-PA et al., Docket M-2018-2645254

- **CAUSE-PA Statement 1-SR, the Rebuttal Testimony of Harry S. Geller**
 - 15 pages of written testimony

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :
for Approval of a Default Service Plan for the : Docket No. P-2020-3019522
Period June 1, 2021, through May 31, 2025 :

**EGS PARTIES' DESIGNATION
OF TESTIMONY AND EXHIBITS
TO BE PRESENTED AT HEARING**

The EGS Parties intend to present the following statements for inclusion in the record of the above-captioned proceeding:

- 1) EGS Parties' Statement No. 1, the Direct Testimony of Christopher Kallaher, including Appendix A.
- 2) EGS Parties' Statement No. 1-R, the Rebuttal Testimony of Christopher Kallaher.
- 3) EGS Parties' Statement No. 1-SR, the Surrebuttal Testimony of Christopher Kallaher.
- 4) If needed, Mr. Kallaher's Verification of the three statements.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Petition of Duquesne Light Company for :
Approval of Default Service Plan for :
the Period of June 1, 2021 through : Docket No. P-2020-3019522
May 31, 2025 :**

**LISTING OF THE EXHIBITS AND TESTIMONY OFFERED
BY CALPINE RETAIL HOLDINGS, LLC**

- Calpine Retail Holdings Statement No. 1: the Rebuttal Testimony of Becky Merola

- Verification Statement of Becky Merola

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition of Duquesne Light Company for :
Approval of Default Service Plan for the : Docket No. P-2020-3019522
Period June 1, 2021 Through May 31, 2025 :
:

**PREPARED HEARING EXHIBIT LIST OF NATURAL RESOURCES DEFENSE
COUNCIL**

NRDC intends to move for admission of the following evidence into the record at the September 9, 2020 hearing in the above captioned matter:

- **NRDC Statement 1, Direct testimony of Kathleen Harris**
 - 25 Pages of written testimony
 - Exhibit KAH-100: Resume of Kathleen Harris
 - Exhibit KAH-101: Synapse Energy Economics Inc. analysis, July 2020
 - Exhibit KAH-102: DLC Response to Interrogatory NRDC-I-7
 - Exhibit KAH-103: DLC Response to Interrogatory NRDC-II-2
 - Exhibit KAH-104: DLC Response to Interrogatory NRDC-II-1

- **NRDC Statement 2, Rebuttal testimony of Kathleen Harris**
 - 13 pages of written testimony
 - Exhibit KAH-106: DLC Response to Interrogatory NRDC-I-8
 - Exhibit KAH-106: EGS Parties' Response to Interrogatory DLC-I-1

- **NRDC Statement 3, Surrebuttal testimony of Kathleen Harris**
 - 6 Pages of written testimony
 - KAH-107: Synapse Energy Economics Inc., analysis, August 2020



Duquesne Light Company
Historical Changes in Class-Average Prices-to-Compare

	Price-to-Compare (cents/kWh)										Change in Price-to-Compare (cents/kWh)									
	Residential			Small C&I			Medium C&I				Residential			Small C&I			Medium C&I			
	RS	RA	RH	GS	GM <25kW	GMH <25kW	UMS/MTS	GM >=25kW <200kW	GMH >=25kW <200kW		RS	RA	RH	GS	GM <25kW	GMH <25kW	UMS/MTS	GM >=25kW <200kW	GMH >=25kW <200kW	
1/1/10	8.54	8.51	7.57	8.23	8.29	7.95	7.50	7.19	6.92											
6/1/10	8.17	8.07	7.60	8.39	8.25	7.85	7.31	7.15	6.79	(0.37)	(0.44)	0.03	0.16	(0.04)	(0.10)	(0.19)		(0.04)	(0.13)	
7/1/10	8.17	8.07	7.60	8.39	8.25	7.85	7.31	7.17	6.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.42	0.42	
1/1/11	8.89	8.79	8.58	6.98	6.84	6.44	7.67	7.17	6.81	0.72	0.72	0.98	(1.41)	(1.41)	(1.41)	0.36		(0.40)	(0.40)	
1/2/11	8.89	8.78	8.57	6.98	6.84	6.44	7.67	7.17	6.81	0.00	(0.01)	(0.01)	0.00	0.00	0.00	0.00		0.00	0.00	
6/1/11	9.33	9.26	8.96	7.05	7.09	6.68	8.00	7.06	6.76	0.44	0.48	0.39	0.07	0.25	0.24	0.33		(0.11)	(0.05)	
12/1/11	9.33	9.26	8.96	7.05	7.09	6.68	8.00	6.88	6.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.18)	(0.18)	
1/1/12	9.32	9.24	8.94	7.04	7.08	6.67	7.99	6.87	6.57	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)		(0.01)	(0.01)	
6/1/12	9.69	9.79	9.25	5.76	5.93	5.89	8.18	6.07	5.89	0.57	0.55	0.51	(1.28)	(1.15)	(0.78)	0.19		(0.80)	(0.58)	
12/1/12	9.99	9.79	9.25	5.76	5.93	5.89	8.18	5.57	5.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.40)	(0.40)	
6/1/13	6.60	6.59	5.80	6.05	6.28	6.29	5.94	6.06	5.82	(3.29)	(3.20)	(3.45)	0.29	0.35	0.40	(2.24)		0.39	0.23	
12/1/13	6.59	6.58	5.79	5.93	6.16	6.17	5.82	5.62	5.38	(0.01)	(0.01)	(0.01)	(0.12)	(0.12)	(0.12)	(0.12)		(0.44)	(0.44)	
6/1/14	8.08	7.97	7.44	6.67	6.86	6.85	6.27	8.14	7.77	1.49	1.39	1.65	0.74	0.70	0.68	0.45		2.52	2.39	
12/1/14	8.09	7.98	7.45	6.27	7.46	7.45	6.87	8.24	7.87	0.01	0.01	0.01	0.60	0.60	0.60	0.60		0.10	0.10	
6/1/15	7.98	7.75	7.33	6.98	7.11	7.08	6.82	6.96	6.80	(0.11)	(0.23)	(0.12)	(0.29)	(0.35)	(0.37)	(0.05)		(1.28)	(1.07)	
9/1/15	7.98	7.75	7.33	6.98	7.11	7.08	6.82	6.50	6.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.46)	(0.46)	
12/1/15	7.77	7.54	7.12	6.75	6.88	6.85	6.59	7.48	7.32	(0.21)	(0.21)	(0.21)	(0.23)	(0.23)	(0.23)	(0.23)		0.98	0.88	
3/1/16	7.77	7.54	7.12	6.75	6.88	6.85	6.59	6.29	6.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(1.19)	(1.19)	
6/1/16	8.07	7.78	7.04	6.78	6.85	6.44	6.27	5.82	5.55	0.30	0.24	(0.08)	0.33	(0.03)	(0.41)	(0.32)		(0.67)	(0.56)	
9/1/16	8.07	7.78	7.04	6.78	6.85	6.44	6.27	5.37	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.25)	(0.25)	
12/1/16	7.83	7.54	6.80	6.60	6.67	6.26	6.09	6.35	6.28	(0.24)	(0.24)	(0.24)	(0.18)	(0.18)	(0.18)	(0.18)		0.98	0.98	
3/1/17	7.83	7.54	6.80	6.60	6.67	6.26	6.09	5.46	5.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.89)	(0.89)	
6/1/17	7.79	7.65	7.16	6.69	6.81	6.85	6.15	6.61	6.52	(0.04)	0.11	0.36	0.09	0.14	0.59	0.06		1.15	1.13	
9/1/17	7.79	7.65	7.16	6.69	6.81	6.85	6.15	6.48	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.13)	(0.13)	
12/1/17	7.83	7.69	7.20	6.89	7.01	7.05	6.35	7.12	7.03	0.04	0.04	0.04	0.20	0.20	0.20	0.20		0.64	0.64	
3/1/18	7.83	7.69	7.20	6.89	7.01	7.05	6.35	6.67	6.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.45)	(0.45)	
6/1/18	7.86	7.55	7.04	6.99	7.27	7.01	6.66	7.09	6.85	0.13	(0.14)	(0.16)	0.10	0.26	(0.04)	0.31		0.42	0.27	
9/1/18	7.96	7.55	7.04	6.99	7.27	7.01	6.66	6.97	6.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.12)	(0.12)	
10/1/18	7.51	7.10	6.59	6.53	6.82	6.56	6.20	6.52	6.28	(0.45)	(0.45)	(0.45)	(0.46)	(0.45)	(0.45)	(0.45)		(0.45)	(0.45)	
12/1/18	7.45	7.04	6.53	6.49	6.78	6.52	6.16	7.61	7.37	(0.06)	(0.06)	(0.06)	(0.04)	(0.04)	(0.04)	(0.04)		1.09	1.09	
3/1/19	7.45	7.04	6.53	6.49	6.78	6.52	6.16	7.36	7.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.25)	(0.25)	
6/1/19	7.41	7.17	6.61	6.53	6.76	6.37	6.28	6.39	6.17	(0.04)	0.13	0.08	0.04	(0.02)	(0.15)	0.12		(0.97)	(0.85)	
9/1/19	7.41	7.17	6.61	6.53	6.76	6.37	6.28	5.68	5.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00		(0.71)	(0.71)	
12/1/19	7.10	6.86	6.30	6.24	6.47	6.08	5.99	6.75	6.53	(0.31)	(0.31)	(0.31)	(0.29)	(0.29)	(0.29)	(0.29)		1.07	1.07	

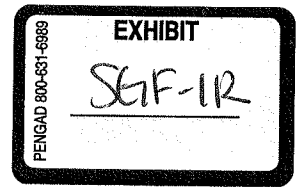


Exhibit SGF- 1R

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-3

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation."

- a) Define the term, "all-resource Request for Proposals," as used in this sentence.
- b) Describe in detail how the design of the "all-resource Request for Proposals" would be developed.
- c) Describe in detail the process to implement the "all-resource Request for Proposals."
- d) Would the "all-resource Request for Proposals" include all generation resources, including non-renewable generating resources?
- e) Would the "all-resource Request for Proposals" include all zero carbon generating resources (e.g., solar, wind, nuclear, hydro)?
- f) Would the "all-resource Request for Proposals" include non-generation resources (e.g., energy storage, demand-side resources)?
- g) What products would be solicited in the "all-resource Request for Proposals"?
- h) Would both new and existing resources be considered in the "all-resource Request for Proposals"?
- i) What would be the contract terms for the "all-resource Request for Proposals," including both contract term lengths and other terms of the contracts?
- j) What would be the qualification requirements for bidders in the "all-resource Request for Proposals"?
- k) On what basis would winning bidders be selected in the "all-resource Request for Proposals"?
- l) How would definitional differences between the different types of products (e.g., the timing of the energy supplied, the quantity of PJM capacity credits supplied per MWh, ancillary services supplied, etc.) be considered in the selection of the winning bidders?

Response:

- a) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.¹

¹ Wilson, J. et al. April 2020. "Making the Most of the Power Plant Market: Best Practices for All-Source Electric Generation Procurement." *Energy Innovation*. Available at: <https://energyinnovation.org/wp-content/uploads/2020/04/All-Source-Utility-Electricity-Generation-Procurement-Best-Practices.pdf>.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

- b) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- c) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- d) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- e) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- f) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- g) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- h) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- i) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- j) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- k) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.
- l) Dr. Stanton's testimony does not include instructions of how to conduct an all-resource RFP. For more information on this topic see Energy Innovation's April 2020 Report.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-4

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation." Describe the "Integrated Resource Modelling to determine the least cost mix of resources" in detail, including the process to develop the associated model(s), the necessary modeling assumptions and market forecasts, how the modeling assumptions and market forecasts would be agreed upon, what stakeholders would be involved, who would be responsible for coding and running the model, who would be responsible for approving the results of the model, and the timing of approval of the results of the model.

Response:

Dr. Stanton's testimony does not provide instructions on how to conduct an IRP. For information on this subject please see RAP's June 2013 Report.²

² Wilson, R. et al. June 2013. "Best Practices in Electric Utility Integrated Resource Planning." *Prepared for the Regulatory Assistance Project*. Available at: <https://www.raponline.org/wp-content/uploads/2016/05/rapsynapse-wilsonbiewald-bestpracticesinirp-2013-jun-21.pdf>.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-5

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation." Exactly what specific outputs would be measured by the modeling, and exactly how would these measurements be factored or weighted to determine whether a given mix of resources is "least cost" given any competing considerations in this determination.

Response:

Dr. Stanton's testimony does not provide instructions on how to conduct an all-resource RFP or an IRP. For information on this subject please see RAP's June 2013 Report,³ and Energy Innovation's April 2020 Report.⁴

³ Wilson, R. et al. June 2013. "Best Practices in Electric Utility Integrated Resource Planning." *Prepared for the Regulatory Assistance Project*. Available at: <https://www.raonline.org/wp-content/uploads/2016/05/rapsynapse-wilsonbiewald-bestpracticesinirp-2013-jun-21.pdf>.

⁴ Wilson, J. et al. April 2020. "Making the Most of the Power Plant Market: Best Practices for All-Source Electric Generation Procurement." *Energy Innovation*. Available at: <https://energyinnovation.org/wp-content/uploads/2020/04/All-Source-Utility-Electricity-Generation-Procurement-Best-Practices.pdf>.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-6

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation."

- a) Did Dr. Stanton estimate the time required to develop the detailed plan for the "all-resource Request for Proposals followed by Integrated Resource Modelling"? If so, how long would this require?
- b) Did Dr. Stanton estimate the time required to implement the "all-resource Request for Proposals followed by Integrated Resource Modelling," including the time required to obtain necessary approvals? If so, how long would this require?
- c) Did Dr. Stanton estimate the cost to develop and implement the "all-resource Request for Proposals followed by Integrated Resource Modelling"? If so, provide any cost estimates and any support for those cost estimates.
- d) Under Dr. Stanton's recommendation, who would pay for the costs of developing and implementing the "all-resource Request for Proposals followed by Integrated Resource Modelling"? How would the recovery of such costs be allocated?

Response:

- a) No.
- b) No.
- c) No.
- d) Dr. Stanton's recommendation does not address these costs. For information on this subject please see Energy Innovation's April 2020 Report.⁵

⁵ Wilson, J. et al. April 2020. "Making the Most of the Power Plant Market: Best Practices for All-Source Electric Generation Procurement." *Energy Innovation*. Available at: <https://energyinnovation.org/wp-content/uploads/2020/04/All-Source-Utility-Electricity-Generation-Procurement-Best-Practices.pdf>.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-8

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation." Is Dr. Stanton aware of any Pennsylvania utility default service plan approved by the Commission for which approval required "an all-resource Request for Proposals followed by Integrated Resource Modelling"? If so, please identify the utility and docket number.

Response:

Dr. Stanton's testimony does not address requirements for Commission approval.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-9

Reference page 8, lines 10-13 of Dr. Stanton's direct testimony, where Dr. Stanton states, "An appropriate analysis to determine a prudent mix of contracts would be an all- resource Request for Proposals followed by Integrated Resource Modelling to determine the least cost mix of resources that meet the Company's other requirements including its AECs obligation." Is Dr. Stanton aware of any instance in any U.S. jurisdiction in which the electricity industry has been restructured and customers are afforded retail access, where "an all-resource Request for Proposals followed by Integrated Resource Modelling" was required as a condition of the approval of the default service plan in that jurisdiction? Identify any such jurisdiction, utility, and docket number.

Response:

Dr. Stanton's testimony does not address RFPs and IRP in other jurisdictions.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-12

Reference page 11, lines 14-19 (Table 1) of Dr. Stanton's direct testimony. Please provide all workpapers, electronic files (with formulas intact), assumptions (with sources cited), and calculations that were utilized to calculate the values shown in Table 1.

Response:

Table 1 in Dr. Stanton's testimony is reproduced from the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-14

Reference page 11, lines 14-19 (Table 1) of Dr. Stanton's direct testimony. For each of the "Low," "Base," and "High" natural gas price scenarios, for each year of the 20 years modeled, please provide the percentage of hours in which it is assumed that natural gas fired generating units set the market price for electricity.

Response:

Please refer to the source of the analysis referred to in Table 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-15

Reference page 12, lines 12-17 (Table 2) of Dr. Stanton's direct testimony. Please provide all workpapers, electronic files (with formulas intact), assumptions (with sources cited), and calculations that were used to calculate the values shown in Table 2.

Response:

Please refer to the source of the analysis referred to in Table 2 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-16

Reference page 13, lines 8-13 (Figure 1) of Dr. Stanton's direct testimony. Please provide all workpapers, electronic files (with formulas intact), assumptions (with sources cited), and calculations that were used to calculate the values shown in Figure 1.

Response:

Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-18

Reference page 13, lines 8-13 (Figure 1) of Dr. Stanton's direct testimony.

- a) Please identify all of the assumed winning full requirements default service supply bid prices for each Duquesne Light customer class, in terms of \$/MWh, throughout the 2018-2027 period, that were used to develop the "High Auction" trend.
- b) Please identify all of the assumed winning full requirements default service supply bid prices for each Duquesne Light customer class, in terms of \$/MWh, throughout the 2018-2027 period, that were used to develop the "Base Auction" trend.
- c) Please identify all of the assumed winning full requirements default service supply bid prices for each Duquesne Light customer class, in terms of \$/MWh, throughout the 2018-2027 period, that were used to develop the "Low Auction" trend.
- d) Please identify the assumed natural gas prices, in terms of \$/MMBtu, throughout the 2018-2027 period, that were used to develop the "High Auction" trend.
- e) Please identify the assumed natural gas prices, in terms of \$/MMBtu, throughout the 2018-2027 period, that were used to develop the "Base Auction" trend.
- f) Please identify the assumed natural gas prices, in terms of \$/MMBtu, throughout the 2018-2027 period, that were used to develop the "Low Auction" trend.

Response:

- a) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.
- b) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.
- c) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.
- d) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.
- e) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

- f) Please refer to the source of the analysis referred to in Figure 1 of Dr. Stanton's testimony, the December 2017 analysis conducted by Applied Economics Clinic and Sommer Energy LLC.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-20

Reference page 32, lines 14-15 of Dr. Stanton's direct testimony, where Dr. Stanton states, "I recommend that the Commission require Duquesne to do issue [sic] a bundled renewables RFP."

- a) Define the term, "bundled renewables RFP," as used in this sentence.
- b) What attributes other than AECs would be supplied through the contracts solicited in the "bundled renewables RFP"?
- c) What would be the term length of the contracts solicited in the "bundled renewables RFP"?
- d) Would zero carbon resources (other than solar and wind) be allowed to participate in the "bundled renewables RFP"? If so, specifically which types of zero carbon resources would be allowed to participate?
- e) Would both new and existing resources be allowed to participate in the "bundled renewables RFP"?
- f) Would the long-term contracts solicited in the "bundled renewables RFP" be fixed-price, full requirements supply contracts for a percent of Duquesne Light's default service load similar to the 12-month and 24-month products that Duquesne Light currently purchases (except limited to renewable suppliers and with longer contract terms)? If not, explain how the differences between the supply provided and the supply requirements for the default service load would be satisfied.
- g) Describe the differences between Dr. Stanton's recommendation to "issue a bundled renewables RFP" and Duquesne Light's proposal to enter into a long-term contract to support a utility-scale solar project, as described on pages 10 and 13-17 of Duquesne Light Statement No. 1.
- h) Explain how Dr. Stanton's recommended "bundled renewables RFP" is consistent with the "all-resource Request for Proposals" that Dr. Stanton characterizes on page 8, lines 10-13 as an "appropriate analysis."

Response:

- a) In the Pennsylvania context, a bundled renewables RFP refers to an RFP that accepts offers that include both AECs and energy.
- b) Dr. Stanton's testimony does not discuss these attributes.
- c) Dr. Stanton's testimony does not discuss these terms.
- d) Dr. Stanton's testimony does not discuss these potential limitations.
- e) Dr. Stanton's testimony does not discuss these potential limitations.
- f) Dr. Stanton's testimony does not discuss these potential limitations.

Duquesne Light Company
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Set I

Witness: Elizabeth A. Stanton, PhD

- g) Dr. Stanton's recommendation suggests a larger number of AECs and MWs.
- h) Duquesne Light requires both AECs and energy. As such, it would issue an RFP for these two attributes, bundled together. There would be no limitations on what types of resources could respond to or be accepted in this RFP process.

Duquesne Light Company
(DLC)
Interrogatories

MAREC Action
Docket No. P-2020-3019522

Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-22

Reference page 32, lines 15-17 of Dr. Stanton's direct testimony, where Dr. Stanton states, "...the Commission should require Duquesne to initiate a pilot program amounting to 10 percent or more of its total AECs obligation (or a minimum of 21 MW solar or 12 MW wind renewables contracts)."

- a) Please provide all workpapers, electronic files (with formulas intact), assumptions (with sources cited), and calculations that were utilized in calculating each of the indicated recommended quantities, identified with underline, in Dr. Stanton's recommendation: "a pilot program amounting to [i] 10 percent or more of [Duquesne Light's] total AECs obligation (or a minimum or [ii] 21 MW solar or [iii] 12 MW wind renewables contracts)."
- b) Please provide all support for recommending the specific quantities underlined in (a).

Response:

- a) Workpapers containing calculations and assumptions can be found in Attachment I-22(a).
- b) The recommendation of 10 percent was offered only as a small number greater than zero, suggesting that Duquesne can at the very least try out a long-term renewable contract approach in a pilot (initial and exploratory) program.

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Duquesne Light Company Interrogatories for MAREC Action
MAREC Action Attachment I-22(a)

Applied Economics Clinic
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Applied Economics Clinic
Economic and Policy Analysis of Energy, Environment and Equity

Last Updated: July 31, 2020

Table of Contents	
Tab Name	Description
Pilot Program Calculations	Calculations associated with pilot program sizes (Solar and Wind)
Library	Underlying assumptions and data

Exhibit SGF-1 R

Duquesne Light Company	Capacity (MW)	Generation (GWh)	Percent of Tier I AEC Obligation
Tier I AEC Requirement (8% of Total Load)	N/A	587	100%
Proposed Solar PPA	7	20	3%
Potential Pilot Program (Solar contracts)	21	59	10%
Potential Pilot Program (Wind contracts)	12	59	10%

Exhibit SGF-1 R

Reference Table 1: ACC Assumptions

AP5 2021 target for Tier 1 energy sources
 AP5 2021 target for Tier 2 energy sources
 Duquesne Light's proposed Solar PPA (MWh)
 Pilot Program Size (% of total ACC obligation)

8%
 10%
 10%

Source: Pennsylvania Public Utility Commission, Pennsylvania Alternative Credit Program Available at <https://www.pennepsc.com/aboutus/>
 Source: Pennsylvania Public Utility Commission, Pennsylvania Alternative Credit Program Available at <https://www.pennepsc.com/aboutus/>
 Source: Direct Testimony of C. James Davis, Docket No. P-2020-3019522
 ACC Assumption

Reference Table 2: Duquesne Light Company's Total Pooled Sales

Source: Ogden, D.B. April 20, 2020. Direct Testimony of David B. Ogden, Exhibit DBO-4. Testimony before the Pennsylvania Public Utility Commission on behalf of Duquesne Light Company, Docket No. P-2020-3019522. Available at http://www.puc.pa.gov/about_puc/cancelledased_case_view.aspx?docket=P-2020-3019522

	2016	2017	2018	2019
Residential and Lighting Load (MWh)	4,540,667	4,211,896	4,600,442	4,409,025
Small Commercial and Industrial Load (MWh)	731,138	680,324	769,058	887,436
Medium Commercial and Industrial Load (MWh)	2,702,271	2,693,593	2,703,106	2,045,953
Total Load (MWh)	7,974,126	7,585,813	8,072,606	7,342,419

Reference Table 3: Lazard Capacity Factors

Source: LAZARD, November 2019. Levelized Cost of Energy/Analysis 13.0. op.16-17. Available at <https://www.lazard.com/perspective/Loe2019>

Technology
 Solar PV (Utility Scale—Crystalline)
 Wind—On Shore

Capacity Factor
 32%
 55%

Duquesne Light Company
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Set I

Witness: Elizabeth A. Stanton, PhD

DLC Set I-23

Reference page 32, line 17, to page 33, line 2, of Dr. Stanton's direct testimony, where Dr. Stanton states, "For optimal results for ratepayers, the Commission should direct the Company to work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables."

- a) Describe in detail the process to "work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables."
- b) Did Dr. Stanton estimate the time required to implement the process to "work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables?" If so, how long would this require?
- c) Did Dr. Stanton estimate the cost of the process to "work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables?" If so, provide any cost estimates and any support for those cost estimates.
- d) Under Dr. Stanton's recommendation, who would pay for the costs of the process to "work together with stakeholders to design a prudent mix that allows customers to receive the benefits of long-term contracts for renewables?" How would the recovery of such costs be allocated?

Response:

- a) Dr. Stanton's testimony does not provide instructions on how to design a stakeholder process. For information on this subject please see RAP's June 2013 Report.⁹
- b) Dr. Stanton's testimony does not address the design of a stakeholder process.
- c) Dr. Stanton's testimony does not address the costs of a stakeholder process.
- d) Dr. Stanton's testimony does not address the allocation of these costs.

⁹ Wilson, R. et al. June 2013. "Best Practices in Electric Utility Integrated Resource Planning." *Prepared for the Regulatory Assistance Project*. Available at: <https://www.raonline.org/wp-content/uploads/2016/05/rapsynapse-wilsonbiewald-bestpracticesinirp-2013-jun-21.pdf>.

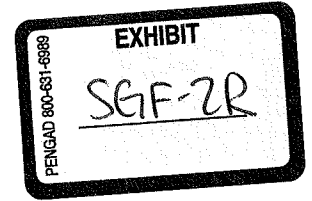


Exhibit SGF- 2R

Duquesne Light Company
 Correction in MAREC Actions' Calculation of Rate of Decrease in Reported Wind Capital Costs to Be Expressed in Nominal Dollars

		"MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx" Values Before Correction	
		Low	High Source
[1]	2016 Wind Capital Cost (\$/KW), 2016\$	1,250	1,700 [MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Library!\$X\$12:\$Y\$12
[2]	2016 CPI-U Value	240.007	240.007 [MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Historical CPI-U (1968-2019)!\$E\$55
[3]	2019 CPI-U Value	255.657	255.657 [MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Historical CPI-U (1968-2019)!\$E\$58
[4]=([3]/[2])	2019/2016 CPI-U Factor	1.065	1.065
[5]=[1]*[4]	2016 Wind Capital Cost (\$/KW), 2019\$	1,332	1,811
[6]	2019 Wind Capital Cost (\$/KW), 2019\$	1,100	1,500 [MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Library!\$R\$31:\$S\$31
[7]=([6]/[5])^(1/3)-1	2016-2019 Annual Change in Cost	-6%	-6% See [MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx]Wind Cost Comparison!\$J\$7:\$K\$7

		"MAREC Action Testimony Attachment B_Elizabeth A Stanton.xlsx" Values After Correction (Change Expressed in Nominal Dollars)	
		Low	High
[8]=[1]	2016 Wind Capital Cost (\$/KW), 2016\$	1,250	1,700
[9]=[6]	2019 Wind Capital Cost (\$/KW), 2019\$	1,100	1,500
[10]=([9]/[8])^(1/3)-1	2016-2019 Annual Change in Cost	-4%	-4%



Exhibit SGF- 3R

Duquesne Light Company
Calculation of Total Residential EGS Charges over Default Service in Percentage Terms (Based on CAUSE-PA Exhibit 1)
 Values from CAUSE-PA Exhibit 1

Month	Residential						
	[1] Average EGS (\$/kWh)	[2] Average Default Service (\$/kWh)	[3] EGS Load (kWh)	[4] = ([1] - [2]) x [3] Total EGS Charges over Default Service (\$)	[5] = [2] x [3] Total Charges If EGS Load on Default Service (\$)	[6] = [4]/[5] Total EGS Charges over Default Service (%)	
Jan-17	0.0914	0.0766	120,588,155	1,780,622.42	9,240,326.83		
Feb-17	0.0921	0.0766	103,134,132	1,597,571.09	7,897,188.72		
Mar-17	0.0921	0.0768	93,792,921	1,430,364.89	7,203,676.37		
Apr-17	0.0924	0.0768	87,299,261	1,359,280.78	6,707,282.78		
May-17	0.0933	0.0773	80,135,904	1,276,373.90	6,198,108.22		
Jun-17	0.0937	0.0774	88,388,546	1,602,427.25	7,614,223.16		
Jul-17	0.0947	0.0775	133,507,232	2,287,416.56	10,349,723.00		
Aug-17	0.0953	0.0782	139,161,836	2,390,721.66	10,876,714.90		
Sep-17	0.0959	0.0775	108,206,087	1,993,101.10	8,383,198.69		
Oct-17	0.0967	0.0778	97,159,120	1,831,829.57	7,561,100.25		
Nov-17	0.0970	0.0772	84,742,093	1,677,478.75	6,545,848.53		
Dec-17	0.0978	0.0770	101,203,185	2,105,667.56	7,796,218.12		
Jan-18	0.0972	0.0770	135,146,552	2,729,889.90	10,411,992.02		
Feb-18	0.0985	0.0775	108,244,386	2,273,884.81	8,393,468.80		
Mar-18	0.0986	0.0773	92,958,535	1,978,133.39	7,189,114.97		
Apr-18	0.0957	0.0773	94,014,558	1,730,519.60	7,266,271.85		
May-18	0.0992	0.0776	81,694,100	1,768,181.41	6,339,568.64		
Jun-18	0.1002	0.0783	115,969,709	2,543,532.52	9,081,646.11		
Jul-18	0.1003	0.0790	145,595,505	3,092,591.23	11,504,642.41		
Aug-18	0.1000	0.0790	145,479,629	3,046,362.82	11,498,848.30		
Sep-18	0.0998	0.0791	144,104,990	2,838,073.65	11,395,120.28		
Oct-18	0.0998	0.0774	102,756,638	2,306,685.97	7,952,834.25		
Nov-18	0.1010	0.0740	89,944,966	2,425,361.71	6,657,093.19		
Dec-18	0.1009	0.0734	104,164,351	2,866,818.17	7,641,572.91		
Jan-19	0.1032	0.0730	112,617,393	3,403,135.21	8,217,611.69		
Feb-19	0.1038	0.0727	111,704,900	3,470,867.47	8,122,517.52		
Mar-19	0.1047	0.0728	97,223,088	3,102,751.15	7,075,250.29		
Apr-19	0.1053	0.0728	80,440,515	2,608,091.69	5,858,496.66		
May-19	0.1061	0.0737	74,513,398	2,413,538.00	5,493,577.50		
Jun-19	0.1054	0.0736	91,353,607	2,900,714.13	6,726,095.95		
Jul-19	0.1041	0.0736	130,542,289	3,984,537.70	9,607,167.24		
Aug-19	0.1032	0.0736	145,429,776	4,298,880.02	10,707,258.02		
Sep-19	0.1022	0.0736	116,892,397	3,335,796.02	8,606,769.17		
Oct-19	0.1023	0.0735	92,948,949	2,674,469.32	6,834,860.55		
Nov-19	0.1035	0.0732	75,383,236	2,287,982.11	5,517,931.06		
Dec-19	0.1036	0.0718	93,006,825	2,958,691.01	6,673,539.12		
Jan-20	0.1023	0.0698	101,925,422	3,312,441.92	7,116,696.93		
Feb-20	0.1026	0.0696	90,267,394	2,978,409.42	6,281,715.73		
Mar-20	0.1032	0.0697	84,539,358	2,835,720.33	5,892,939.93		
Apr-20	0.1034	0.0699	83,018,744	2,781,447.34	5,806,735.41		
May-20	0.1033	0.0700	77,870,542	2,590,953.42	5,453,629.56		
				[4]	[5]	[6] = [4]/[5]	
				Total EGS Charges over Default Service	Total Charges If EGS Load on Default Service	Total EGS Charges over Default Service	
				(\$)	(\$)	(%)	
				Jan-17 through May-20	102,869,316.86	321,698,574.64	32%
				Jan-19 through May-20	51,936,426.25	119,992,792.34	43%