Lindsay Baxter
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May 26, 2022

VIA OVERNIGHT MAIL

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
2nd Floor, Room-N201
400 North Street
Harrisburg, PA 17120

Re: **Duquesne Light Company**
Amended Quarterly Electric Reliability Report – 2nd Quarter 2021
Docket No. M-2016-2522508

Dear Secretary Chiavetta:

Enclosed please find an amended Quarterly Electric Reliability Report for the second quarter of 2021 that corrects errors in the original filing. Duquesne Light Company recently identified an error in a query used in the creation of this report that incorrectly identified the device that operated most frequently (i.e. opened or closed by Operator action or automatically due to a fault) for each circuit.

This error impacted Duquesne Light's Q4 2020 report, and all four quarterly reports filed in 2021. Amended reports are being filed for all five quarters with corrections to the worst performing circuits list and Attachment A. The amended reports are being filed in redlined and clean versions.

This amended report should replace the previously filed report in its entirety and Duquesne Light requests that the original filing be removed from the docket.

The report is submitted in two versions, proprietary and non-proprietary. The proprietary version contains all the information required by 52 Pa. Code § 57.195 and is marked as "**Confidential**." Duquesne Light Company respectfully requests that the proprietary version of the Quarterly Electric Reliability Report not be made available to the public.

The non-proprietary version has been e-filed at the above referenced docket.

If you have any questions regarding the information contained in this filing, please feel free to contact me.

Sincerely,

Lindsay A. Baxter
Manager, Regulatory and Clean Energy Strategy

Enclosure
cc (w/ redacted version):
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Duquesne Light Company
Second Quarter 2021

Electric Reliability Report

to the

Pennsylvania Public Utility Commission

July 29, 2021

Revised: May 26, 2022

57.195 Reporting Requirements

(e)(1) *A description of each major event that occurred during the preceding quarter, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted in order to avoid or minimize the impact of similar events in the future.*

No major events occurred during the second quarter of 2021.

(e)(2) *Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the electric distribution company's service territory for the preceding quarter. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customer interruptions, the number of customers affected, and the customer minutes of interruption. If MAIFI values are provided, the report shall also include the number of customer momentary interruptions.*

RELIABILITY BENCHMARKS AND STANDARDS
Duquesne Light Company
System Performance Measures with Major Events Excluded

Entire System				
	SAIDI	**SAIFI**	**CAIDI**	**MAIFI**
Benchmark	126	1.17	108	*
12 Month Standard	182	1.40	130	*
2021 2Q (Rolling 12 mo)	151	0.88	172	*

* Sufficient information to calculate MAIFI is unavailable.

Duquesne Light has been a strong performer in reliability over the past 15 years. The Company's success in this area can be at least partially attributed to the wide deployment of intelligent devices on the system that can quickly isolate a fault to the least number of customers.

Through the second quarter of 2021, Duquesne Light's SAIDI and CAIDI are above both the benchmark, and CAIDI exceeds the 12 month standard, while SAIFI performance is below both the benchmark and standard. The increase in SAIDI and CAIDI is primarily attributable to weather impacts. During the trailing 12 months Duquesne Light has had multiple storms impact our system. Four of those storms affected over 40,000 customers, with the largest storm having over 51,000 customers impacted which is just below the threshold for an excludable event (10% of customers or approximately 60,000 customers).

Formulas used in calculating the indices

$$SAIFI = \frac{\text{(Total KVA interrupted) - (KVA impact of major events)}}{\text{System Connected KVA}}$$

$$SAIDI = \frac{\text{(Total KVA-minutes interrupted) - (KVA-minute impact of major events)}}{\text{System Connected KVA}}$$

$$CAIDI = SAIDI/SAIFI$$

Data used in calculating the indices

Total KVA Interrupted for the Period:	6,932,807 KVA
Total KVA-Minutes Interrupted:	1,189,940,184 KVA-Minutes
System Connected Load as of 6/30/21	7,869,335 KVA

(e)(3) *Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) and other pertinent information such as customers served, number of interruptions, customer minutes interrupted, number of lockouts, and so forth, for the worst performing 5% of the circuits in the system. An explanation of how the electric distribution company defines its worst performing circuits shall be included.*

Circuits are evaluated based on a rolling twelve-month count of lockouts of protective devices (circuit breakers, reclosers, sectionalizers, and line fuses) and on total accumulated KVA-Minutes of customer outage time. Circuits that experience multiple lockouts for a device in combination with high total accumulated KVA-Minutes of customer outage time in each quarterly rolling twelve-month period are identified and the top 5% are reported as Worst-Performing Circuits.

The list of worst-performing circuits is ranked first by the number of KVA-Minutes of outage experienced by customers on these circuits (highest to lowest) and then by device lockouts from highest to lowest. This places a higher priority on circuits with repeat outages affecting customers (SAIFI) while also focusing on outage duration for customers on these circuits (SAIFI and SAIDI).

While repairs are made as quickly as possible following every customer outage, circuits that appear on the worst performing circuits list are targeted for more extensive remediation based on a detailed review of historical outage records looking at root cause problems, field evaluations, and engineering analysis. Project scopes developed as a result of this analysis are incorporated into the Company's Work Plan for engineering, design, and construction. Since the focus is on reducing future customer outage duration and not just outage frequency, special attention is given to establishing/optimizing sectionalizing switch locations and alternate feeds to problem-prone areas of circuits and, where possible, replacing or eliminating equipment that has historically required lengthy repair times as well as a high failure rates.

At the end of each quarter all previously identified circuits are reviewed to verify that past remediation efforts are working and to look for new reliability issues that may be developing. Serious new reliability problems are addressed immediately without waiting additional periods to collect information. This analysis method provides for timely review of circuit performance by in-house staff and it adapts to the dynamic nature of Duquesne Light's distribution system.

Special Note: *Because of sophisticated protection and remote automation technologies that the Company uses on its distribution circuits, not all customers on a circuit identified as a worst performing circuit actually experience significant reliability issues. Circuit problems are generally isolated to one load block of a circuit in less than five minutes with downstream customers only experiencing short momentary operations. Customers upstream of a circuit problem may not even experience a momentary outage. Therefore, many customers on a circuit identified as a poor performer do not experience problems with reliability.*

See Attachment A for a list of worst-performing circuits showing feeder device lockouts and reliability index values associated with each circuit.

(e)(4) Specific remedial efforts taken and planned for the worst performing 5% of the circuits as identified in paragraph (3).

Second Quarter 2021 Rolling 12 Month Circuit Data

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
1 23714 Pine Creek Sectionalizer	9 Total Outage(s) Second Quarter Outage(s): • No outage(s). Previous Outage(s): • Five outages were caused by tree fall-in Outside ROW. • One outage was unknown cause. • One outage was caused by tree fall-in Inside ROW. • Two outages caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2018 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2018. Proposed for 2023.
2 23705 North Fuse Link	3 Total Outages Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q1 2017. Proposed for Q3 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
3 23706 North Fuse Link	4 Total Outage(s) Second Quarter Outage(s): • Two outages were caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW. • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection scheduled for 2021. • Vegetation Management completed Q3 2018. Proposed for 2022.
4 23921 Logan's Ferry Fuse Link	2 Total Outage(s) Second Quarter Outage(s): • No outage(s). Previous Outage(s): • Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q4 2020. Proposed for 2024.
5 23841 Arsenal Sectionalizer	4 Total Outage(s) Second Quarter Outage(s): • One outage was caused by contact with company equipment by vehicle. Previous Outage(s): • Two outages were caused by tree fall-in Outside ROW. • One outage was caused by a storm.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection will be performed in 2017. • Vegetation Management completed Q4 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
6 23707 North Recloser	2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. • One outage was caused by equipment failure. Previous Outage(s): • No outage(s).	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection was performed in 2017. • Vegetation Management completed Q3 2017. Proposed for 2022.
7 23701 North Fuse Link	3 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was caused by animal contact. • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection was performed in 2017. • Vegetation Management completed Q4 2016. Proposed for Q3 2021.
8 23743 Oakland Breaker	3 Total Outage(s) Second Quarter Outage(s): • One outage was caused by equipment failure. • One outage was caused by tree fall-in Inside ROW. Previous Outage(s): • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection was performed in 2018. • Vegetation Management completed Q2 2020. Proposed for 2024.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
9 23646 Wolfe Run Sectionalizer	2 Total Outage(s) Second Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by equipment failure. • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2018 and all high priority repairs completed. • Vegetation Management completed Q2 2018. Proposed for 2024.
10 23869 Wildwood Fuse Link	4 Total Outage(s) Second Quarter Outage(s): • Three outages were caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2020. Proposed for 2025.
11 23700 North Fuse Link	3 Total Outage(s) Second Quarter Outage(s): • Two outages were caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q3 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
12 23745 Oakland Fuse Link	2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by equipment failure. Previous Outage(s): • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q2 2020. Proposed for 2024.
13 23846 Arsenal Breaker	2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by contact by balloon. Previous Outage(s): • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q2 2021.
14 23681 Woodville Breaker	3 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2019 and all high priority repairs completed. • Vegetation Management completed Q2 2016. Proposed for Q3 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
15 23694 Brunot Island Breaker	3 Total Outage(s) Second Quarter Outage(s): • One outage was by an unknown cause. Previous Outage(s): • Two outages were caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection will be performed in 2021 and all high priority repairs completed. • Vegetation Management completed Q4 2018. Proposed for 2022.
16 23880 Rankin Sectionalizer	3 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW. • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2017. Proposed for 2022.
17 23870 Mt. Nebo Fuse Link	4 Total Outage(s) Second Quarter Outage(s): • Two outages were caused by tree fall-in Outside ROW. • One outage was caused by equipment failure. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q4 2017. Proposed for Q4 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
18 23709 North Fuse Link	2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q3 2017. Proposed for 2022.
19 23718 Pine Creek Breaker	2 Total Outage(s) Second Quarter Outage(s): • No outage(s). Previous Outage(s): • Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2019 and all high priority repairs completed. • Vegetation Management completed Q3 2018. Proposed for 2022.
20 23690 Brunot Island Breaker	4 Total Outage(s) Second Quarter Outage(s): • Two outages were by unknown causes. • One outage was caused by equipment failure. Previous Outage(s): • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2018 and all high priority repairs completed. • Vegetation Management completed Q4 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
21 23867 Wildwood Breaker	2 Total Outage(s) Second Quarter Outage(s): • One outage was due to a storm. Previous Outage(s): • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2020. Proposed for 2025.
22 23716 Pine Creek Sectionalizer	2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • One was caused by high winds.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2019 and all high priority repairs completed. • Vegetation Management completed Q1 2019. Proposed for 2023.
23 23732 Universal Sectionalizer	3 Total Outage(s) Second Quarter Outage(s): • One outage was caused by contact with plane, helicopter, balloon, etc. • One outage was due to a storm. Previous Outage(s): • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q3 2016. Proposed for Q4 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
24 23902 Plum Fuse Link	4 Total Outage(s) Second Quarter Outage(s): • One outage was by an unknown cause. • One outage was caused by equipment failure. Previous Outage(s): • One outage was caused by equipment failure. • One outage was caused by high winds.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2017. Proposed for Q4 2021.
25 23842 Arsenal Recloser	2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was caused by wires wrapping together causing a short circuit.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2018. Proposed for 2022.
26 4107 Wilkinsburg Breaker	1 Total Outage(s) Second Quarter Outage(s): • One outage was caused by equipment failure. Previous Outage(s): • No outage(s).	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q1 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
27 23703 North Fuse Link	4 Total Outage(s) Second Quarter Outage(s): • One outage was due to a storm. • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was by an unknown cause. • One outage was due to a storm.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection was performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q4 2016. Proposed for Q3 2021.

(e)(5) *A rolling 12-month breakdown and analysis of outage causes during the preceding quarter, including the number and percentage of service outages, the number of customers interrupted, and customer interruption minutes categorized by outage cause such as equipment failure, animal contact, tree related, and so forth. Proposed solutions to identified service problems shall be reported.*

Proposed solutions to identified service problems are listed in Section (e)(4) above.

July 1, 2020 through June 30, 2021 minus

CAUSE	NO. OF OUTAGES	OUTAGE PERCENTAGE	KVA TOTAL	KVA PERCENTAGE	KVA-MINUTE TOTAL	KVA-MINUTE PERCENTAGE
Storms	451	13%	900,197	13%	216,223,045	18%
Trees (Inside ROW)	124	4%	163,306	2%	44,799,888	4%
Trees (Outside ROW)	1,139	32%	2,471,439	36%	533,781,839	45%
Equipment Failures	763	22%	1,912,474	28%	233,042,360	19%
Overloads	185	5%	61,388	1%	16,299,529	1%
Vehicles	185	5%	503,621	7%	54,217,917	5%
Contact/Dig In	38	1%	65,664	1%	7,312,455	1%
Animal Contact	107	3%	149,038	2%	11,074,584	1%
Unknown	375	11%	478,289	7%	38,834,357	3%
Other	138	4%	227,391	3%	34,354,210	3%
TOTALS	3,505	100%	6,932,807	100%	1,189,940,184	100%

(e)(6) *Quarterly and year-to-date information on progress toward meeting transmission and distribution inspection and maintenance goals/ objectives.*

2021 Transmission and Distribution Goals and Objectives							
Program Project	**Unit of Measurement**	**Target for 2021 2Q**	**Actual for 2021 2Q**	**2Q Percent Complete**	**Targets for Year 2021**	**Actual YTD for 2021**	**Year End % Complete**
Communications Goals							
Communication Battery Maintenance	Battery Tasks	27	26	96%	108	52	48%
Overhead Distribution Goals							
Recloser Inspections	Circuits	33	35	106%	121	77	64%
Pole Inspections	Poles	6,632	6,726	101%	17,677	7,121	40%
OH Line Inspections	Circuits	33	35	106%	121	77	64%
OH Transformer Inspections	Circuits	33	35	106%	121	77	64%
Padmount & Below Grade Insp	Circuits	0	10	N/A	76	72	95%
Overhead Transmission Goals							
Helicopter Inspections	Circuits	11	15	136%	11	15	136%
Ground Inspections	Structures	67	0	0%	354	286	81%
Substations Goals							
Circuit Breaker Maintenance	Breaker Tasks	130	57	44%	375	210	56%
Station Transformer Maintenance	Transformer Tasks	40	43	108%	44	44	100%
Station Battery Maintenance	Battery Tasks	220	242	110%	880	421	48%
Station Relay Maintenance	Relay Tasks	467	372	80%	1,634	586	36%
Station Inspections	Site Visits	465	465	100%	1,860	930	50%
Underground Distribution Goals							
Manhole Inspections	Manholes	300	86	29%	700	349	50%
Major Network Insp (Prot Relay)	Network Protectors	46	8	17%	92	30	33%
Minor Network Visual Inspection (Transformer/Protector/Vault)	Network Transformers	266	38	14%	576	422	73%
Underground Transmission Goals							
Pressurization and Cathodic Protection Plant Inspection	Work Orders	95	92	97%	372	182	49%
Vegetation Management Goals							
Overhead Line Clearance	Circuit Overhead Miles	358	248	69%	1,300	596	46%

(e)(7) *Quarterly and year-to-date information on budgeted versus actual transmission and distribution operation and maintenance expenditures in total and detailed by the EDC's own functional account code or FERC account code as available.*

Budget Variance Recap – O&M Expenses
For the Three Months Ending June 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$13,245,999	$11,955,436	$(1,290,563)
Human Resources	4,269,376	4,125,535	(143,841)
Operations/Operation Services	17,806,308	18,326,171	519,863
Technology	13,352,578	12,009,724	(1,342,854)
General Corporate*	11,381,834	10,062,291	(1,319,543)
Total	$60,056,095	$56,479,157	$(3,576,938)

*Includes Finance, Office of General Counsel, and Senior Management costs.

Budget Variance Recap – O&M Expenses
Year to Date through June 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$27,593,684	$28,419,047	$825,363
Human Resources	8,216,412	8,838,455	622,043
Operations/Operation Services	35,542,510	36,377,853	835,343
Technology	27,954,255	24,893,579	(3,060,676)
General Corporate*	22,580,092	20,487,160	(2,092,932)
Total	$121,886,953	$119,016,094	$(2,870,859)

*Includes Finance, Office of General Counsel, and Senior Management costs.

(e)(8) *Quarterly and year-to-date information on budgeted versus actual transmission and distribution capital expenditures in total and detailed by the EDC's own functional account code or FERC account code as available.*

Budget Variance Recap -Capital
For the Three Months Ending June 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$2,049,463	$2,762,972	$713,509
Human Resources	3,829,365	3,388,647	(440,718)
Operations/Operation Services	65,022,918	89,295,330	24,272,412
Technology	7,181,337	9,960,191	2,778,854
General Corporate*	9,184,935	6,681,718	(2,503,217)
Total	$87,268,018	$112,088,858	$24,820,840

*Includes Finance, Office of General Counsel, and Senior Management costs.

Budget Variance Recap - Capital
Year to Date through June 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$3,792,450	$5,523,475	$1,731,025
Human Resources	7,590,594	6,921,195	(669,399)
Operations/Operation Services	131,672,257	172,911,951	41,239,694
Technology	14,093,906	19,869,412	5,775,506
General Corporate*	18,734,905	13,339,736	(5,395,169)
Total	$175,884,112	$218,565,769	$42,681,657

*Includes Finance, Office of General Counsel, and Senior Management costs.

(e)(9) *Dedicated staffing levels for transmission and distribution operation and maintenance at the end of the quarter, in total and by specific category (e.g. linemen, technician, and electrician).*

Job Title	Number of Employees
Telecom Splicer/Trouble Tech	5
Electronic Technician	15
Telecom Technician	2
Total Telecom	**22**
Electrical Equipment Technician	35
Protection & Control Technician	32
Yard Group Leader	3
Rigger	5
Laborer	2
Total Substation	**77**
UG Splicer	34
UG Cable Inspector	11
Cable Tester	1
Network Operator	13
Equipment Material Handler	1
Total Underground	**60**
Apprentice T&D	20
Equipment Attendant	1
Lineworker	129
Service Crew Leader	4
Equipment Material Handler	5
Total Overhead	**159**
Right of Way Agent	4
Surveyor	4
Total Real Estate	**8**
Total Street Light Changer	**7**
Engineering Technician	47
GIS Technician	7
T&D Mobile Worker	6
Test Technician, Mobile	6
Total Engineering	**66**
Senior Operator Apprentice	35
Senior Operator	27
Troubleshooter	19
Total Senior Operator/Troubleshooter	**81**
Total Switching Dispatcher	**10**
Total Employees	**490**

(e)(10) *Quarterly and year-to-date information on contractor hours and dollars for transmission and distribution operation and maintenance.*

CONFIDENTIAL INFORMATION

2nd Quarter 2021

Contractor Dollars: REDACTED
Contractor Hours: REDACTED

YTD 2021

Contractor Dollars: REDACTED
Contractor Hours: REDACTED

(e)(11) *Monthly call-out acceptance rate for transmission and distribution maintenance workers presented in terms of both the percentage of accepted call-outs and the amount of time it takes the EDC to obtain the necessary personnel. A brief description of the EDC's call-out procedure should be included when appropriate.*

CONFIDENTIAL INFORMATION

Call-Out Acceptance Rate –2nd Quarter 2021
REDACTED

Amount of Time it Takes to Obtain the Necessary Personnel – 2nd Quarter 2021
REDACTED

(d)(2) *The name, title, telephone number and e-mail address of the persons who have knowledge of the matters, and can respond to inquiries.*

Matthew G. Bucek – Director, Substations & Grid P/C
(412) 393-8878, mbucek@duqlight.com

Jaime Bachota – Assistant Controller, Accounting & Financial Reporting
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ATTACHMENT A

(e)(3) *Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) and other pertinent information such as customers served, number of interruptions, customer minutes interrupted, number of lockouts, and so forth, for the worst performing 5% of the circuits in the system.*

Rank	Circuit No	Circuit Name	Equipment Type	Device	Last Lockout	Ckt KVA	Total KVA Min Interrupted	Total KVA Interrupted	SAIDI	SAIFI	CAIDI
1	23714	Pine Creek	SECTIONALIZER	WA609	2021-03-28	32875	37451796	212207	1139.22	6.45	176.49
2	23705	North	FUSE LINK	Pole # 264273	2021-06-14	37665	30610109	77253	812.69	2.05	396.23
3	23706	North	FUSE LINK	Pole # 99838	2021-06-14	32220	28043409	131211	870.37	4.07	213.73
4	23921	Logans Ferry	FUSE LINK	Pole # 109091	2021-03-01	30891	26796940	62511	830.10	1.95	428.68
5	23841	Arsenal	SECTIONALIZER	WR362	2021-05-17	35930	26359411	142422	742.21	4.06	185.08
6	23707	North	RECLOSER	WR381	2021-06-13	24830	23866970	39398	961.22	1.59	605.79
7	23701	North	FUSE LINK	Pole # 265954	2021-06-13	20760	21345126	48216	1028.19	2.32	442.70
8	23743	Oakland	S.S. BREAKER	BREAKER	2021-06-13	29193	19968446	77410	691.45	2.70	257.96
9	23646	Wolfe Run	SECTIONALIZER	WA483	2020-08-27	36176	19250474	74830	532.13	2.07	257.26
10	23869	Wildwood	FUSE LINK	Pole # 126251	2021-06-30	24841	18467223	78343	743.42	3.15	235.72
11	23700	North	FUSE LINK	Pole # 267585	2021-06-22	20734	17494611	73218	843.76	3.53	238.94
12	23745	Oakland	FUSE LINK	Pole # 49921	2021-06-14	29485	17395645	35972	592.70	1.25	483.59
13	23846	Arsenal	S.S. BREAKER	BREAKER	2021-05-15	39783	16871646	76531	441.39	2.02	220.46
14	23681	Woodville	S.S. BREAKER	BREAKER	2021-06-29	32960	16843182	147116	511.02	4.46	114.49
15	23694	Brunot Is.	S.S. BREAKER	BREAKER	2021-06-29	28410	16557674	89215	582.81	3.14	185.59
16	23880	Rankin	SECTIONALIZER	EA95	2021-04-29	28995	15770529	40077	503.14	1.27	393.51
17	23870	Mt. Nebo	FUSE LINK	Pole # 208	2021-06-30	33392	14798227	76066	443.17	2.28	194.54
18	23709	North	FUSE LINK	Pole # 292979	2021-06-14	22779	14377033	65726	631.15	2.89	218.74
19	23718	Pine Creek	S.S. BREAKER	BREAKER	2021-02-05	22338	14246962	27826	637.79	1.25	512.00
20	23690	Brunot Is.	S.S. BREAKER	BREAKER	2021-05-21	21330	13101866	76006	614.25	3.56	172.38
21	23867	Wildwood	S.S. BREAKER	BREAKER	2021-06-13	32745	12342962	61916	376.94	1.89	199.35
22	23716	Pine Creek	SECTIONALIZER	WA783	2021-04-30	35398	11963833	100967	337.98	2.85	118.49
23	23732	Universal	SECTIONALIZER	EA47	2021-05-26	22910	11794753	142134	522.48	6.29	82.98
24	23902	Plum	FUSE LINK	Pole # 562	2021-06-26	29575	11460763	119782	348.93	3.75	95.68
25	23842	Arsenal	RECLOSER	WR697	2021-06-22	33185	11326672	55379	336.28	1.64	204.53
26	4107	Wilkinsburg	S.S. BREAKER	BREAKER	2021-06-29	5422	11300757	13988	2084.24	2.58	807.89
27	23703	North	FUSE LINK	Pole # 315568	2021-06-14	22232	11259566	28030	506.46	1.26	401.70

Duquesne Light Company
Second Quarter 2021

Electric Reliability Report

to the

Pennsylvania Public Utility Commission

July 29, 2021

Revised: May 26, 2022

57.195 Reporting Requirements

(e)(1) *A description of each major event that occurred during the preceding quarter, including the time and duration of the event, the number of customers affected, the cause of the event and any modified procedures adopted in order to avoid or minimize the impact of similar events in the future.*

No major events occurred during the second quarter of 2021.

(e)(2) *Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the electric distribution company's service territory for the preceding quarter. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customer interruptions, the number of customers affected, and the customer minutes of interruption. If MAIFI values are provided, the report shall also include the number of customer momentary interruptions.*

RELIABILITY BENCHMARKS AND STANDARDS
Duquesne Light Company

System Performance Measures with Major Events Excluded

Entire System				
	SAIDI	**SAIFI**	**CAIDI**	**MAIFI**
Benchmark	126	1.17	108	*
12 Month Standard	182	1.40	130	*
2021 2Q (Rolling 12 mo)	151	0.88	172	*****

* Sufficient information to calculate MAIFI is unavailable.

Duquesne Light has been a strong performer in reliability over the past 15 years. The Company's success in this area can be at least partially attributed to the wide deployment of intelligent devices on the system that can quickly isolate a fault to the least number of customers.

Through the second quarter of 2021, Duquesne Light's SAIDI and CAIDI are above both the benchmark, and CAIDI exceeds the 12 month standard, while SAIFI performance is below both the benchmark and standard. The increase in SAIDI and CAIDI is primarily attributable to weather impacts. During the trailing 12 months Duquesne Light has had multiple storms impact our system. Four of those storms affected over 40,000 customers, with the largest storm having over 51,000 customers impacted which is just below the threshold for an excludable event (10% of customers or approximately 60,000 customers).

Formulas used in calculating the indices

$$SAIFI = \frac{\text{(Total KVA interrupted) - (KVA impact of major events)}}{\text{System Connected KVA}}$$

$$SAIDI = \frac{\text{(Total KVA-minutes interrupted) - (KVA-minute impact of major events)}}{\text{System Connected KVA}}$$

$$CAIDI = SAIDI/SAIFI$$

Data used in calculating the indices

Total KVA Interrupted for the Period:	6,932,807 KVA
Total KVA-Minutes Interrupted:	1,189,940,184 KVA-Minutes
System Connected Load as of 6/30/21	7,869,335 KVA

(e)(3) *Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) and other pertinent information such as customers served, number of interruptions, customer minutes interrupted, number of lockouts, and so forth, for the worst performing 5% of the circuits in the system. An explanation of how the electric distribution company defines its worst performing circuits shall be included.*

Circuits are evaluated based on a rolling twelve-month count of lockouts of protective devices (circuit breakers, reclosers, sectionalizers, and line fuses) and on total accumulated KVA-Minutes of customer outage time. Circuits that experience multiple lockouts for a device in combination with high total accumulated KVA-Minutes of customer outage time in each quarterly rolling twelve-month period are identified and the top 5% are reported as Worst-Performing Circuits.

The list of worst-performing circuits is ranked first by the number of KVA-Minutes of outage experienced by customers on these circuits (highest to lowest) and then by device lockouts from highest to lowest. This places a higher priority on circuits with repeat outages affecting customers (SAIFI) while also focusing on outage duration for customers on these circuits (SAIFI and SAIDI).

While repairs are made as quickly as possible following every customer outage, circuits that appear on the worst performing circuits list are targeted for more extensive remediation based on a detailed review of historical outage records looking at root cause problems, field evaluations, and engineering analysis. Project scopes developed as a result of this analysis are incorporated into the Company's Work Plan for engineering, design, and construction. Since the focus is on reducing future customer outage duration and not just outage frequency, special attention is given to establishing/optimizing sectionalizing switch locations and alternate feeds to problem-prone areas of circuits and, where possible, replacing or eliminating equipment that has historically required lengthy repair times as well as a high failure rates.

At the end of each quarter all previously identified circuits are reviewed to verify that past remediation efforts are working and to look for new reliability issues that may be developing. Serious new reliability problems are addressed immediately without waiting additional periods to collect information. This analysis method provides for timely review of circuit performance by in-house staff and it adapts to the dynamic nature of Duquesne Light’s distribution system.

Special Note: *Because of sophisticated protection and remote automation technologies that the Company uses on its distribution circuits, not all customers on a circuit identified as a worst performing circuit actually experience significant reliability issues. Circuit problems are generally isolated to one load block of a circuit in less than five minutes with downstream customers only experiencing short momentary operations. Customers upstream of a circuit problem may not even experience a momentary outage. Therefore, many customers on a circuit identified as a poor performer do not experience problems with reliability.*

See Attachment A for a list of worst-performing circuits showing feeder device lockouts and reliability index values associated with each circuit.

(e)(4) Specific remedial efforts taken and planned for the worst performing 5% of the circuits as identified in paragraph (3).

Second Quarter 2021 Rolling 12 Month Circuit Data

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
1 23714 Pine Creek Sectionalizer	~~14~~9 Total Outage(s) Second Quarter Outage(s): ~~• Three outages were caused by tree fall-in Outside ROW.~~ • No outage(s). Previous Outage(s): • Five outages were caused by tree fall-in Outside ROW. • One outage was unknown cause. ~~• Two outages were caused by high winds.~~ • One outage was caused by tree fall-in Inside ROW. • Two outages caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2018 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2018. Proposed for 2023.
2 23705 North ~~Recloser~~Fuse Link	~~6~~3 Total Outages Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): ~~• One outage was caused by equipment failure.~~ • ~~Four outage~~Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q1 2017. Proposed for Q3 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
3 23706 North ~~Recloser~~ Fuse Link	~~5~~4 Total Outage(s) Second Quarter Outage(s): • Two outages were caused by tree fall-in Outside ROW. Previous Outage(s): • ~~Two outages were~~One outage was caused by tree fall-in Outside ROW. • ~~One outages was caused by contact with company equipment by vehicle.~~ • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection scheduled for 2021. • Vegetation Management completed Q3 2018. Proposed for 2022.
4 23921 Logan's Ferry ~~Recloser~~ Fuse Link	42 Total Outage(s) Second Quarter Outage(s): • No outage(s). Previous Outage(s): • ~~Three outages were caused by a storm.~~ • ~~One outage was~~Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q4 2020. Proposed for 2024.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
5 23841 Arsenal ~~Recloser~~ Sectionalizer	~~5~~4 Total Outage(s) Second Quarter Outage(s): ~~• Two outages were caused by high winds.~~ • One outage was caused by contact with company equipment by vehicle. Previous Outage(s): • ~~One outage was~~ Two outages were caused by tree fall-in Outside ROW. ~~• One outage was caused by high current.~~ • One outage was caused by a storm.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection will be performed in 2017. • Vegetation Management completed Q4 2018. Proposed for 2022.
6 23707 North Recloser	~~1~~2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. • One outage was caused by equipment failure. Previous Outage(s): • No outage(s).	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection was performed in 2017. • Vegetation Management completed Q3 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
7 23701 North Fuse Link	~~2~~3 Total Outage(s) Second Quarter Outage(s): ~~• One outage was caused by high winds.~~ • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): ~~• No outage(s).~~ • One outage was caused by animal contact. • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection was performed in 2017. • Vegetation Management completed Q4 2016. Proposed for Q3 2021.
8 23743 Oakland ~~Recloser~~Breaker	~~4~~3 Total Outage(s) Second Quarter Outage(s): ~~• One outage was caused by tree fall-in Outside ROW.~~ • ~~Two outages were~~One outage was caused by equipment failure. • One outage was caused by tree fall-in Inside ROW. Previous Outage(s): ~~• No outage(s)~~ • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection was performed in 2018. • Vegetation Management completed Q2 2020. Proposed for 2024.
9 23646 Wolfe Run Sectionalizer	2 Total Outage(s) Second Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by equipment failure. • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2018 and all high priority repairs completed. • Vegetation Management completed Q2 2018. Proposed for 2024.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
10 23869 Wildwood ~~Recloser~~ Fuse Link	4 Total Outage(s) Second Quarter Outage(s): • Three outages were caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2020. Proposed for 2025.
11 23700 North Fuse Link	3 Total Outage(s) Second Quarter Outage(s): • Two outages were caused by tree fall-in Outside ROW. Previous Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q3 2017. Proposed for 2022.
12 23745 Oakland ~~Recloser~~ Fuse Link	2 Total Outage(s) Second Quarter Outage(s): • ~~Two outages were~~One outage was caused by equipment failure. Previous Outage(s): • ~~No outage(s).~~ • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q2 2020. Proposed for 2024.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
13 23846 Arsenal ~~Recloser~~ Breaker	~~6~~2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by contact by balloon. • ~~Three outages were caused by storms.~~ Previous Outage(s): • ~~Two outages were caused by wires wrapped together.~~ • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q2 2021.
14 23681 Woodville ~~Recloser~~ Breaker	~~5~~3 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • ~~One outage was caused by equipment failure.~~ • ~~Three~~Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2019 and all high priority repairs completed. • Vegetation Management completed Q2 2016. Proposed for Q3 2021.
15 23694 Brunot Island ~~Sectionalizer~~ Breaker	~~6~~3 Total Outage(s) Second Quarter Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • One outage was by an unknown cause. Previous Outage(s): • ~~Three outages were caused by tree fall-in Outside ROW.~~ • ~~One outage was~~Two outages were caused by equipment failure. • ~~One outage was caused by contact by balloon.~~	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection will be performed in 2021 and all high priority repairs completed. • Vegetation Management completed Q4 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
16 23880 Rankin Sectionalizer	3 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW. • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2017. Proposed for 2022.
17 23870 Mt. Nebo ~~Recloser~~ Fuse Link	~~3~~4 Total Outage(s) Second Quarter Outage(s): • ~~No outage(s).~~ • Two outages were caused by tree fall-in Outside ROW. • One outage was caused by equipment failure. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW. • ~~Two outages were caused by equipment failure.~~	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q4 2017. Proposed for Q4 2021.
18 23709 North ~~Recloser~~ Fuse Link	~~3~~2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. • ~~One outages was caused by equipment failure.~~ Previous Outage(s): • ~~One outage was caused by company personnel operating error.~~ • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q3 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
19 23718 Pine Creek ~~Recloser~~ Breaker	~~3~~2 Total Outage(s) Second Quarter Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • No outage(s). Previous Outage(s): • Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2019 and all high priority repairs completed. • Vegetation Management completed Q3 2018. Proposed for 2022.
20 23690 Brunot Island ~~Recloser~~ Breaker	~~3~~4 Total Outage(s) Second Quarter Outage(s): • Two outages were by unknown causes. • ~~One outage was caused by tree fall-in Outside ROW.~~ • One outage was caused by equipment failure. Previous Outage(s): • ~~Two outages were~~One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2018 and all high priority repairs completed. • Vegetation Management completed Q4 2018. Proposed for 2022.
21 23867 Wildwood ~~Recloser~~ Breaker	2 Total Outage(s) Second Quarter Outage(s): • ~~No outage(s).~~ • One outage was due to a storm. Previous Outage(s): • ~~Two outages were caused by unknown causes.~~ • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2020. Proposed for 2025.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
22 23716 Pine Creek ~~Recloser~~ Sectionalizer	2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • ~~One outage was caused by a storm.~~ • One was caused by high winds.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2019 and all high priority repairs completed. • Vegetation Management completed Q1 2019. Proposed for 2023.
23 23732 Universal Sectionalizer	~~6~~3 Total Outage(s) Second Quarter Outage(s): • ~~No outage(s).~~ • One outage was caused by contact with plane, helicopter, balloon, etc. • One outage was due to a storm. Previous Outage(s): • ~~Four outages were caused by wires blown together in high winds.~~ • One outage was caused by equipment failure. • ~~One outage was caused by tree fall-in Outside ROW.~~	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q3 2016. Proposed for Q4 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
24 23902 Plum Fuse Link	~~2~~4 Total Outage(s) Second Quarter Outage(s): • ~~No outage(s).~~ • One outage was by an unknown cause. • One outage was caused by equipment failure. Previous Outage(s): • ~~One outage was caused by an unknown cause.~~ • ~~One outage caused by tree fall-in Outside ROW.~~ • One outage was caused by equipment failure. • One outage was caused by high winds.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2017. Proposed for Q4 2021.
25 23842 Arsenal Recloser	2 Total Outage(s) Second Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • ~~One outage was caused by wires blown together in high winds.~~ • One outage was caused by wires wrapping together causing a short circuit.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
26 4107 Wilkinsburg ~~Transformer~~ Breaker	~~7~~1 Total Outage(s) Second Quarter Outage(s): • ~~Five outage(s) were caused by an overload due to high current.~~ • One outage was caused by equipment failure. Previous Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • ~~One outage was caused by tree fall-in Inside ROW.~~ • No outage(s).	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q1 2021.
27 23703 North ~~Sectionalizer~~ Fuse Link	~~1~~4 Total Outage(s) Second Quarter Outage(s): • ~~No outage(s).~~ • One outage was due to a storm. • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): ~~One outage was caused by tree fall-in Outside ROW.~~ • One outage was by an unknown cause. • One outage was due to a storm.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection was performed in 2017 and all high priority repairs completed. • Vegetation Management completed Q4 2016. Proposed for Q3 2021.

(e)(5) *A rolling 12-month breakdown and analysis of outage causes during the preceding quarter, including the number and percentage of service outages, the number of customers interrupted, and customer interruption minutes categorized by outage cause such as equipment failure, animal contact, tree related, and so forth. Proposed solutions to identified service problems shall be reported.*

Proposed solutions to identified service problems are listed in Section (e)(4) above.

July 1, 2020 through June 30, 2021 minus

CAUSE	NO. OF OUTAGES	OUTAGE PERCENTAGE	KVA TOTAL	KVA PERCENTAGE	KVA-MINUTE TOTAL	KVA-MINUTE PERCENTAGE
Storms	451	13%	900,197	13%	216,223,045	18%
Trees (Inside ROW)	124	4%	163,306	2%	44,799,888	4%
Trees (Outside ROW)	1,139	32%	2,471,439	36%	533,781,839	45%
Equipment Failures	763	22%	1,912,474	28%	233,042,360	19%
Overloads	185	5%	61,388	1%	16,299,529	1%
Vehicles	185	5%	503,621	7%	54,217,917	5%
Contact/Dig In	38	1%	65,664	1%	7,312,455	1%
Animal Contact	107	3%	149,038	2%	11,074,584	1%
Unknown	375	11%	478,289	7%	38,834,357	3%
Other	138	4%	227,391	3%	34,354,210	3%
TOTALS	3,505	100%	6,932,807	100%	1,189,940,184	100%

(e)(6) *Quarterly and year-to-date information on progress toward meeting transmission and distribution inspection and maintenance goals/ objectives.*

2021 Transmission and Distribution Goals and Objectives							
Program Project	**Unit of Measurement**	**Target for 2021 2Q**	**Actual for 2021 2Q**	**2Q Percent Complete**	**Targets for Year 2021**	**Actual YTD for 2021**	**Year End % Complete**
Communications Goals							
Communication Battery Maintenance	Battery Tasks	27	26	96%	108	52	48%
Overhead Distribution Goals							
Recloser Inspections	Circuits	33	35	106%	121	77	64%
Pole Inspections	Poles	6,632	6,726	101%	17,677	7,121	40%
OH Line Inspections	Circuits	33	35	106%	121	77	64%
OH Transformer Inspections	Circuits	33	35	106%	121	77	64%
Padmount & Below Grade Insp	Circuits	0	10	N/A	76	72	95%
Overhead Transmission Goals							
Helicopter Inspections	Circuits	11	15	136%	11	15	136%
Ground Inspections	Structures	67	0	0%	354	286	81%
Substations Goals							
Circuit Breaker Maintenance	Breaker Tasks	130	57	44%	375	210	56%
Station Transformer Maintenance	Transformer Tasks	40	43	108%	44	44	100%
Station Battery Maintenance	Battery Tasks	220	242	110%	880	421	48%
Station Relay Maintenance	Relay Tasks	467	372	80%	1,634	586	36%
Station Inspections	Site Visits	465	465	100%	1,860	930	50%
Underground Distribution Goals							
Manhole Inspections	Manholes	300	86	29%	700	349	50%
Major Network Insp (Prot Relay)	Network Protectors	46	8	17%	92	30	33%
Minor Network Visual Inspection (Transformer/Protector/Vault)	Network Transformers	266	38	14%	576	422	73%
Underground Transmission Goals							
Pressurization and Cathodic Protection Plant Inspection	Work Orders	95	92	97%	372	182	49%
Vegetation Management Goals							
Overhead Line Clearance	Circuit Overhead Miles	358	248	69%	1,300	596	46%

(e)(7) *Quarterly and year-to-date information on budgeted versus actual transmission and distribution operation and maintenance expenditures in total and detailed by the EDC's own functional account code or FERC account code as available.*

Budget Variance Recap – O&M Expenses
For the Three Months Ending June 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$13,245,999	$11,955,436	$(1,290,563)
Human Resources	4,269,376	4,125,535	(143,841)
Operations/Operation Services	17,806,308	18,326,171	519,863
Technology	13,352,578	12,009,724	(1,342,854)
General Corporate*	11,381,834	10,062,291	(1,319,543)
Total	$60,056,095	$56,479,157	$(3,576,938)

*Includes Finance, Office of General Counsel, and Senior Management costs.

Budget Variance Recap – O&M Expenses
Year to Date through June 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$27,593,684	$28,419,047	$825,363
Human Resources	8,216,412	8,838,455	622,043
Operations/Operation Services	35,542,510	36,377,853	835,343
Technology	27,954,255	24,893,579	(3,060,676)
General Corporate*	22,580,092	20,487,160	(2,092,932)
Total	$121,886,953	$119,016,094	$(2,870,859)

*Includes Finance, Office of General Counsel, and Senior Management costs.

(e)(8) *Quarterly and year-to-date information on budgeted versus actual transmission and distribution capital expenditures in total and detailed by the EDC's own functional account code or FERC account code as available.*

Budget Variance Recap -Capital
For the Three Months Ending June 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$2,049,463	$2,762,972	$713,509
Human Resources	3,829,365	3,388,647	(440,718)
Operations/Operation Services	65,022,918	89,295,330	24,272,412
Technology	7,181,337	9,960,191	2,778,854
General Corporate*	9,184,935	6,681,718	(2,503,217)
Total	$87,268,018	$112,088,858	$24,820,840

*Includes Finance, Office of General Counsel, and Senior Management costs.

Budget Variance Recap - Capital
Year to Date through June 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$3,792,450	$5,523,475	$1,731,025
Human Resources	7,590,594	6,921,195	(669,399)
Operations/Operation Services	131,672,257	172,911,951	41,239,694
Technology	14,093,906	19,869,412	5,775,506
General Corporate*	18,734,905	13,339,736	(5,395,169)
Total	$175,884,112	$218,565,769	$42,681,657

*Includes Finance, Office of General Counsel, and Senior Management costs.

(e)(9) *Dedicated staffing levels for transmission and distribution operation and maintenance at the end of the quarter, in total and by specific category (e.g. linemen, technician, and electrician).*

Job Title	Number of Employees
Telecom Splicer/Trouble Tech	5
Electronic Technician	15
Telecom Technician	2
Total Telecom	**22**
Electrical Equipment Technician	35
Protection & Control Technician	32
Yard Group Leader	3
Rigger	5
Laborer	2
Total Substation	**77**
UG Splicer	34
UG Cable Inspector	11
Cable Tester	1
Network Operator	13
Equipment Material Handler	1
Total Underground	**60**
Apprentice T&D	20
Equipment Attendant	1
Lineworker	129
Service Crew Leader	4
Equipment Material Handler	5
Total Overhead	**159**
Right of Way Agent	4
Surveyor	4
Total Real Estate	**8**
Total Street Light Changer	**7**
Engineering Technician	47
GIS Technician	7
T&D Mobile Worker	6
Test Technician, Mobile	6
Total Engineering	**66**
Senior Operator Apprentice	35
Senior Operator	27
Troubleshooter	19
Total Senior Operator/Troubleshooter	**81**
Total Switching Dispatcher	**10**
Total Employees	**490**

(e)(10) *Quarterly and year-to-date information on contractor hours and dollars for transmission and distribution operation and maintenance.*

CONFIDENTIAL INFORMATION

2nd Quarter 2021

Contractor Dollars: REDACTED
Contractor Hours: REDACTED

YTD 2021

Contractor Dollars: REDACTED
Contractor Hours: REDACTED

(e)(11) *Monthly call-out acceptance rate for transmission and distribution maintenance workers presented in terms of both the percentage of accepted call-outs and the amount of time it takes the EDC to obtain the necessary personnel. A brief description of the EDC's call-out procedure should be included when appropriate.*

CONFIDENTIAL INFORMATION

Call-Out Acceptance Rate –2nd Quarter 2021
REDACTED

Amount of Time it Takes to Obtain the Necessary Personnel – 2nd Quarter 2021
REDACTED

(d)(2) *The name, title, telephone number and e-mail address of the persons who have knowledge of the matters, and can respond to inquiries.*

Matthew G. Bucek – Director, Substations & Grid P/C
(412) 393-8878, mbucek@duqlight.com

Jaime Bachota – Assistant Controller, Accounting & Financial Reporting
(412) 393-1122, jbachota@duqlight.com

Jason Keller – Director, Operations Center
(412) 393-2897, jkeller@duqlight.com

ATTACHMENT A

(e)(3) *Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) and other pertinent information such as customers served, number of interruptions, customer minutes interrupted, number of lockouts, and so forth, for the worst performing 5% of the circuits in the system.*

ORIGINAL

Rank	Circuit No	Circuit Name	Equipment Type	Device	Last Lockout	Ckt KVA	Total KVA Min Interrupted	Total KVA Interrupted	SAIDI	SAIFI	CAIDI
1	23714	Pine Creek	Sectionalizer	WA609	2021-06-04	32875	37451796	212207	1139.218128	6.454965	176.48709
2	23705	North	Recloser	WR441	2021-06-14	37665	30610109	77253	812.69372	2.051055	396.231978
3	23706	North	Recloser	WR368	2021-06-14	32220	28043409	131211	870.372718	4.072345	213.727576
4	23921	Logans Ferry	Recloser	ER230	2020-11-15	30891	26796940	62511	830.101717	1.948515	428.675593
5	23841	Arsenal	Recloser	WR1061	2021-06-14	35930	26359411	142422	742.210006	4.057498	185.079629
6	23707	North	Recloser	WR409	2021-06-14	24830	23866970	39398	961.215061	1.586709	605.79141
7	23701	North	Fuse link	40K	2021-06-22	20760	21345126	48216	1028.185259	2.322543	442.697984
8	23743	Oakland	Recloser	ER99	2021-06-22	29193	19968446	77410	691.450381	2.69552	257.95693
9	23646	Wolfe Run	Sectionalizer	WA483	2020-08-28	36176	19250474	74830	532.133845	2.068497	257.2561
10	23869	Wildwood	Recloser	WR706	2021-06-21	24841	18467223	78343	743.417051	3.153777	235.722693
11	23700	North	Fuse link	80E	2021-06-22	20734	17494611	73218	843.764395	3.531301	238.938662
12	23745	Oakland	Recloser	ER338	2021-06-14	29485	17395645	35972	592.70346	1.253171	483.588485
13	23846	Arsenal	Recloser	ER267	2021-06-14	39783	16871646	76531	441.390393	2.018562	220.455057
14	23681	Woodville	Recloser	ER240	2021-06-29	32960	16843182	147116	511.01887	4.463469	114.489124
15	23694	Brunot Is.	Sectionalizer	WA432	2021-06-13	28410	16557674	89215	582.811474	3.140266	185.592938
16	23880	Rankin	Sectionalizer	EA95	2021-04-29	28995	15770529	40077	503.140712	1.272965	393.505726
17	23870	Mt. Nebo	Recloser	WR299	2020-08-23	33392	14798227	76066	443.166835	2.27797	194.544566
18	23709	North	Recloser	SWR727	2021-06-14	22779	14377033	65726	631.152947	2.885376	218.741943
19	23718	Pine Creek	Recloser	WR1000	2021-06-14	22338	14246962	27826	637.790401	1.245679	512.001796
20	23690	Brunot Is.	Recloser	WR394	2021-06-13	21330	13101866	76006	614.245944	3.563337	172.379364
21	23867	Wildwood	Recloser	WR977	2021-01-20	32745	12342962	61916	376.941883	1.890853	199.350119
22	23716	Pine Creek	Recloser	WR783	2021-04-30	35398	11963833	100967	337.980478	2.852336	118.492507
23	23732	Universal	Sectionalizer	EA45	2020-11-16	22910	11794753	142134	522.481308	6.287375	82.983332
24	23902	Plum	Fuse link	80E	2021-03-01	29575	11460763	119782	348.926846	3.748523	95.680177
25	23842	Arsenal	Recloser	WR697	2021-06-22	33185	11326672	55379	336.278684	1.642653	204.530092
26	4107	Wilkinsburg	Transformer	No Device	2021-06-30	5422	11300757	13988	2084.241423	2.579859	807.889405
27	23703	North	Sectionalizer	WA377	2020-08-28	22232	11259566	28030	506.457627	1.260794	401.696967

AMENDED

Rank	Circuit No	Circuit Name	Equipment Type	Device	Last Lockout	Ckt KVA	Total KVA Min Interrupted	Total KVA Interrupted	SAIDI	SAIFI	CAIDI
1	23714	Pine Creek	SECTIONALIZER	WA609	2021-03-28	32875	37451796	212207	1139.22	6.45	176.49
2	23705	North	FUSE LINK	Pole # 264273	2021-06-14	37665	30610109	77253	812.69	2.05	396.23
3	23706	North	FUSE LINK	Pole # 99838	2021-06-14	32220	28043409	131211	870.37	4.07	213.73
4	23921	Logans Ferry	FUSE LINK	Pole # 109091	2021-03-01	30891	26796940	62511	830.10	1.95	428.68
5	23841	Arsenal	SECTIONALIZER	WR362	2021-05-17	35930	26359411	142422	742.21	4.06	185.08
6	23707	North	RECLOSER	WR381	2021-06-13	24830	23866970	39398	961.22	1.59	605.79
7	23701	North	FUSE LINK	Pole # 265954	2021-06-13	20760	21345126	48216	1028.19	2.32	442.70
8	23743	Oakland	S.S. BREAKER	BREAKER	2021-06-13	29193	19968446	77410	691.45	2.70	257.96
9	23646	Wolfe Run	SECTIONALIZER	WA483	2020-08-27	36176	19250474	74830	532.13	2.07	257.26
10	23869	Wildwood	FUSE LINK	Pole # 126251	2021-06-30	24841	18467223	78343	743.42	3.15	235.72
11	23700	North	FUSE LINK	Pole # 267585	2021-06-22	20734	17494611	73218	843.76	3.53	238.94
12	23745	Oakland	FUSE LINK	Pole # 49921	2021-06-14	29485	17395645	35972	592.70	1.25	483.59
13	23846	Arsenal	S.S. BREAKER	BREAKER	2021-05-15	39783	16871646	76531	441.39	2.02	220.46
14	23681	Woodville	S.S. BREAKER	BREAKER	2021-06-29	32960	16843182	147116	511.02	4.46	114.49
15	23694	Brunot Is.	S.S. BREAKER	BREAKER	2021-06-29	28410	16557674	89215	582.81	3.14	185.59
16	23880	Rankin	SECTIONALIZER	EA95	2021-04-29	28995	15770529	40077	503.14	1.27	393.51
17	23870	Mt. Nebo	FUSE LINK	Pole # 208	2021-06-30	33392	14798227	76066	443.17	2.28	194.54
18	23709	North	FUSE LINK	Pole # 292979	2021-06-14	22779	14377033	65726	631.15	2.89	218.74
19	23718	Pine Creek	S.S. BREAKER	BREAKER	2021-02-05	22338	14246962	27826	637.79	1.25	512.00
20	23690	Brunot Is.	S.S. BREAKER	BREAKER	2021-05-21	21330	13101866	76006	614.25	3.56	172.38
21	23867	Wildwood	S.S. BREAKER	BREAKER	2021-06-13	32745	12342962	61916	376.94	1.89	199.35
22	23716	Pine Creek	SECTIONALIZER	WA783	2021-04-30	35398	11963833	100967	337.98	2.85	118.49
23	23732	Universal	SECTIONALIZER	EA47	2021-05-26	22910	11794753	142134	522.48	6.29	82.98
24	23902	Plum	FUSE LINK	Pole # 562	2021-06-26	29575	11460763	119782	348.93	3.75	95.68
25	23842	Arsenal	RECLOSER	WR697	2021-06-22	33185	11326672	55379	336.28	1.64	204.53
26	4107	Wilkinsburg	S.S. BREAKER	BREAKER	2021-06-29	5422	11300757	13988	2084.24	2.58	807.89
27	23703	North	FUSE LINK	Pole # 315568	2021-06-14	22232	11259566	28030	506.46	1.26	401.70