Lindsay Baxter
Manager, Regulatory and Clean Energy Strategy
lbaxter@duqlight.com
(412) 393-6224

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 – 3rd Quarter 2021
Docket No. M-2016-2522508

Dear Secretary Chiavetta:

Enclosed please find an amended Quarterly Electric Reliability Report for the third 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):
Dan Searfoorce (dsearfoorc@pa.gov)
John Van Zant (jvanzant@pa.gov)
Harry Bidelspach (hbidelspac@pa.gov)
Patrick Cicero (pcicero@paoca.org)
Stephen Gray (sgray@pa.gov)
Sharon Webb (swebb@pa.gov)

Duquesne Light Company
Third Quarter 2021

Electric Reliability Report

to the

Pennsylvania Public Utility Commission

October 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 third 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 3Q (Rolling 12 mo)	184	0.97	190	*

* 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 third quarter of 2021, Duquesne Light's SAIDI and CAIDI are above both the benchmark and 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. Over the past decade, increases have been observed in the average, minimum, and maximum temperature; wind speed; total inches of precipitation; and the number of days with precipitation. Storm wind speeds have increased over the past decade by approximately 20 mph in both sustained and gust wind speeds: approximately 15 mph to both categories, in the past two years. During the trailing 12 months Duquesne Light has had multiple reported storms impacting our system. Five 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).[1]

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:	7,636,073 KVA
Total KVA-Minutes Interrupted:	1,447,497,121 KVA-Minutes
System Connected Load as of 9/30/21	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

[1] See Docket No. M-2021-3023564, Outage Reports to inform the Commission of utility service outages per 52 PA CODE 67.1

customers (SAIFI) while also focusing on outage duration for customers on these circuits (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).

Third Quarter 2021 Rolling 12 Month Circuit Data

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
1 23610 Findlay Recloser	2 Total Outage(s) Third Quarter Outage(s): • One outage was caused by equipment failure. Previous Outage(s): • One outage was caused by high winds.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2021 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2021.
2 23705 North Fuse Link	4 Total Outages Third Quarter Outage(s): • One outage was by an unknown cause. Previous Outage(s): • Three outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • 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 Q4 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
3 23921 Logan's Ferry Sectionalizer	3 Total Outage(s) Third Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. • One outage was by an unknown cause. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company plans to perform reliability enhancements, such as installing additional overhead protective devices. • Vegetation Management completed Q4 2020. Proposed for 2024.
4 23707 North Recloser	2 Total Outage(s) Third Quarter Outage(s): • No outage(s). 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. • Distribution Overhead Line Inspection was performed in 2017. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2017. Proposed for 2022.
5 23706 North Fuse Link	4 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • Three outages were caused by tree fall-in Outside ROW. • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection scheduled for 2021. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
6 23743 Oakland Recloser	3 Total Outage(s) Third Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • Two outages were caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection was performed in 2018. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2020. Proposed for 2024.
7 23614 Findlay Fuse Link	2 Total Outage(s) Third Quarter Outage(s): • One outage was caused by equipment failure. Previous Outage(s): • One outage was caused by animal contact.	• Permanent repairs were made following each outage as necessary. • The Company plans to perform reliability enhancements, such as installing new switching devices. • Vegetation Management completed Q3 2021.
8 23868 Wildwood Fuse Link	7 Total Outage(s) Third Quarter Outage(s): • One outage due to a storm. Previous Outage(s): • Two outages were caused by high winds. • Four outages were by unknown causes.	• Permanent repairs were made following each outage as necessary. • 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 Q3 2020. Proposed for 2025.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
9 23714 Pine Creek Sectionalizer	6 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • Three outages were caused by tree fall-in Outside ROW. • One outage was by an unknown cause. • One outage was caused by tree fall-in Inside ROW. • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • 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. Mid-Cycle clearing proposed Q4 2021.
10 23701 North Fuse Link	3 Total Outage(s) Third Quarter Outage(s): • One outage was by an unknown cause. Previous Outage(s): • One outage was caused by high winds. • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection was performed in 2017. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2016. Proposed for Q4 2021.
11 23700 North Fuse Link	3 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by equipment failure. • Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
12 23841 Arsenal Fuse Link	2 Total Outage(s) Third 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. • Distribution Overhead Line Inspection will be performed in 2017. • The Company plans to perform reliability enhancements, such as reconfiguring switching devices. • Vegetation Management completed Q4 2018. Proposed for 2022.
13 23816 Bellevue Fuse Link	3 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by contact with company equipment by vehicle. • 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. • Distribution Overhead Line Inspection performed in 2017 with next inspection in 2022, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2018. Proposed for 2023.
14 23869 Wildwood Breaker	4 Total Outage(s) Third 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. • One outage was caused by contact with company equipment by vehicle.	• Permanent repairs were made following each outage as necessary. • 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 Q4 2020. Proposed for 2025.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
15 23694 Brunot Island Breaker	3 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • Two outages were caused by equipment failure. • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection will be performed in 2021 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2018. Proposed for 2022.
16 23745 Oakland Fuse Link	2 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was by an unknown cause. • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2020. Proposed for 2024.
17 23822 Highland Sectionalizer	3 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was due to a storm. • One outage was caused by high winds. • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • 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 Q3 2019. Proposed for 2023.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
18 23709 North Breaker	3 Total Outage(s) Third Quarter Outage(s): • One outage was by an unknown cause. 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. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2017. Proposed for 2022.
19 23802 Elywn Fuse Link	1 Total Outage(s) Third Quarter Outage(s): • One outage was by an unknown cause. Previous Outage(s): • No outage(s).	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2019 with next inspection in 2024, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2020. Proposed for 2024.
20 23750 Dravosburg Fuse Link	4 Total Outage(s) Third Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • One outage was by an unknown cause. • One outage was caused by high winds. • One outage was due to a storm.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2021 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
21 23860 Wilson Breaker	1 Total Outage(s) Third Quarter Outage(s): • One outage was caused by tree fall-in Inside ROW. Previous Outage(s): • No outage(s).	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2019 with next inspection in 2024, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2018. Proposed for 2022.
22 23690 Brunot Island Breaker	5 Total Outage(s) Third Quarter Outage(s): • One outage was caused by equipment failure. Previous Outage(s): • Two outages were by unknown causes. • Two outages were caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • 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 2022.
23 23730 Universal Recloser	3 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • Two outages were caused by tree fall-in Outside ROW. • One outage was caused by contact with vehicle.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2018 with next inspection in 2023, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2018. Proposed for 2023.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
24 4107 Wilkinsburg Breaker	3 Total Outage(s) Third Quarter Outage(s): • One outage was caused by tree fall-in Inside ROW. • 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. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company performed reliability enhancements in 2021, specifically configuring switching devices. • Vegetation Management completed Q1 2021.
25 23661 Crescent Fuse Link	3 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • Two outages were by unknown causes. • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2017 with next inspection in 2022, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2020. Proposed for 2026.
26 23880 Rankin Fuse Link	3 Total Outage(s) Third Quarter Outage(s): • One outage was due to a storm. Previous Outage(s): • One outage was caused by equipment failure. • One outage was due to a storm.	• Permanent repairs were made following each outage as necessary. • 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 Q4 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
27 22177 Universal-Wilkinsburg No.4 Breaker	3 Total Outage(s) Third Quarter Outage(s): • One outage was caused by a storm. • Two outages were caused by tree fall-in Inside ROW. Previous Outage(s): • No outage(s).	• Permanent repairs were made following each outage as necessary. • 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 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.

October 1, 2020 through September 30, 2021

CAUSE	NO. OF OUTAGES	OUTAGE PERCENTAGE	KVA TOTAL	KVA PERCENTAGE	KVA-MINUTE TOTAL	KVA-MINUTE PERCENTAGE
Storms	568	16%	1,355,723	18%	353,761,980	24%
Trees (Inside ROW)	187	5%	405,950	5%	105,077,150	7%
Trees (Outside ROW)	1,139	33%	2,529,348	33%	560,850,870	39%
Equipment Failures	717	21%	1,873,619	25%	259,291,089	18%
Overloads	67	2%	34,600	0%	13,064,490	1%
Vehicles	182	5%	544,096	7%	76,540,113	5%
Contact/Dig In	41	1%	111,379	1%	9,231,073	1%
Animal Contact	109	3%	141,822	2%	10,435,053	1%
Unknown	353	10%	463,875	6%	34,209,607	2%
Other	131	4%	175,661	2%	25,035,696	2%
TOTALS	3,494	100%	7,636,073	100%	1,447,497,121	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 3Q**	**Actual for 2021 3Q**	**3Q Percent Complete**	**Targets for Year 2021**	**Actual YTD for 2021**	**Year End % Complete**
Communications Goals							
Communication Battery Maintenance	Battery Tasks	27	24	89%	108	76	70%
Overhead Distribution Goals							
Recloser Inspections	Circuits	33	24	73%	121	101	83%
Pole Inspections	Poles	6,627	6,964	105%	17,677	14,085	80%
OH Line Inspections	Circuits	33	24	73%	121	101	83%
OH Transformer Inspections	Circuits	33	24	73%	121	101	83%
Padmount & Below Grade Insp	Circuits	0	1	N/A	76	73	96%
Overhead Transmission Goals							
Helicopter Inspections	Circuits	0	0	N/A	11	15	136%
Ground Inspections	Structures	20	0	0%	354	286	81%
Substations Goals							
Circuit Breaker Maintenance	Breaker Tasks	75	40	53%	375	250	67%
Station Transformer Maintenance	Transformer Tasks	0	4	N/A	44	48	109%
Station Battery Maintenance	Battery Tasks	220	215	98%	880	636	72%
Station Relay Maintenance	Relay Tasks	520	135	26%	1,634	721	44%
Station Inspections	Site Visits	465	465	100%	1,860	1,395	75%
Underground Distribution Goals							
Manhole Inspections	Manholes	200	2	1%	700	351	50%
Major Network Insp (Prot Relay)	Network Protectors	20	18	90%	92	48	52%
Minor Network Visual Inspection (Transformer/Protector/Vault)	Network Transformers	190	4	2%	576	426	74%
Underground Transmission Goals							
Pressurization and Cathodic Protection Plant Inspection	Work Orders	94	103	110%	372	285	77%
Vegetation Management Goals							
Overhead Line Clearance	Circuit Overhead Miles	372	329	88%	1,300	925	71%

(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 September 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$14,041,737	$16,891,690	$2,849,953
Human Resources	3,598,793	4,605,537	1,006,744
Operations/Operation Services	16,542,798	17,068,998	526,200
Technology	13,139,247	11,573,247	(1,566,000)
General Corporate*	15,633,747	18,045,320	2,411,573
Total	$62,956,322	$68,184,792	$5,228,470

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

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

	Total Actual	Total Budget	Variance
Customer Service	$41,635,421	$45,310,737	$3,675,316
Human Resources	11,815,205	13,443,992	1,628,787
Operations/Operation Services	52,085,308	53,446,851	1,361,543
Technology	41,093,502	36,466,826	(4,626,676)
General Corporate*	38,213,839	38,532,480	318,641
Total	$184,843,275	$187,200,886	$2,357,611

*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 September 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$2,255,734	$2,768,708	$512,974
Human Resources	3,594,192	3,689,493	95,301
Operations/Operation Services	59,263,670	70,444,850	11,181,180
Technology	7,390,830	10,126,041	2,735,211
General Corporate*	18,552,236	12,060,396	(6,491,840)
Total	$91,056,662	$99,089,488	$8,032,826

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

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

	Total Actual	Total Budget	Variance
Customer Service	$6,048,184	$8,292,183	$2,243,999
Human Resources	11,184,786	10,610,688	(574,098)
Operations/Operation Services	190,935,927	243,356,801	52,420,874
Technology	21,484,736	29,995,453	8,510,717
General Corporate*	37,287,141	25,400,132	(11,887,009)
Total	$266,940,774	$317,655,257	$50,714,483

*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	4
Electronic Technician	15
Telecom Technician	2
Total Telecom	**21**
Electrical Equipment Technician	39
Protection & Control Technician	32
Yard Group Leader	3
Rigger	5
Laborer	2
Total Substation	**81**
UG Splicer	36
UG Cable Inspector	11
Cable Tester	1
Network Operator	13
Equipment Material Handler	1
Total Underground	**62**
Apprentice T&D	15
Equipment Attendant	1
Lineworker	131
Service Crew Leader	4
Equipment Material Handler	4
Total Overhead	**155**
Right of Way Agent	4
Surveyor	4
Total Real Estate	**8**
Total Street Light Changer	**5**
Engineering Technician	47
GIS Technician	7
T&D Mobile Worker	7
Test Technician, Mobile	5
Total Engineering	**66**
Senior Operator Apprentice	61
Senior Operator	29
Troubleshooter	16
Total Senior Operator/Troubleshooter	106
Total Switching Dispatcher	9
Total Employees	**513**

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

CONFIDENTIAL INFORMATION

3rd 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 –3rd Quarter 2021
REDACTED

Amount of Time it Takes to Obtain the Necessary Personnel – 3rd 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 Thimons – General Manager, Asset Management
(412) 393-8639, mthimons@duqlight.com

Jaime Bachota – 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.*

Rank	Circuit No	Circuit Name	Equipment Type	Device	Last Lockout	Ckt KVA	Total KVA Min Interrupted	Total KVA Interrupted	SAIDI	SAIFI	CAIDI
1	23610	Findlay	RECLOSER	WR1181	2021-08-09	21388	34873606	52918	1630.52	2.47	659.01
2	23705	North	FUSE LINK	Pole # 264273	2021-07-23	37665	29731349	63519	789.36	1.69	468.07
3	23921	Logans Ferry	SECTIONALIZER	EA1155	2021-08-29	30891	27322249	86724	874.75	2.76	315.05
4	23707	North	RECLOSER	WR381	2021-06-13	24830	23835427	39061	959.94	1.57	610.21
5	23706	North	FUSE LINK	Pole # 99838	2021-06-14	32220	23314668	99114	723.61	3.08	235.23
6	23743	Oakland	RECLOSER	ER754	2021-08-12	29193	22434830	96864	773.43	3.34	231.61
7	23614	Findlay	FUSE LINK	Pole # 341159	2021-09-22	27879	21043687	50432	754.82	1.81	417.27
8	23868	Wildwood	FUSE LINK	Pole # 602115	2021-08-29	33034	20762695	163062	628.53	4.94	127.33
9	23714	Pine Creek	SECTIONALIZER	WA609	2021-03-28	32875	20160527	160970	613.25	4.90	125.24
10	23701	North	FUSE LINK	Pole # 265954	2021-07-18	20760	20086467	48144	967.56	2.32	417.22
11	23700	North	FUSE LINK	Pole # 267585	2021-06-22	20734	18691951	80698	901.51	3.89	231.63
12	23841	Arsenal	FUSE LINK	Pole # 8979	2021-08-13	35930	18362698	59035	511.91	1.66	311.05
13	23816	Bellevue	FUSE LINK	Pole # 61519	2020-11-30	22512	17775431	26734	789.60	1.19	664.90
14	23869	Wildwood	S.S. BREAKER	BREAKER	2021-08-29	24841	16983400	103356	683.68	4.16	164.32
15	23694	Brunot Is.	S.S. BREAKER	BREAKER	2021-06-29	28410	16835730	89964	592.60	3.17	187.14
16	23745	Oakland	FUSE LINK	Pole # 49921	2021-06-14	29485	16550929	15377	561.58	0.52	1076.34
17	23822	Highland	SECTIONALIZER	EA138	2021-05-13	28072	15829942	84452	569.52	3.05	187.44
18	23709	North	S.S. BREAKER	BREAKER	2021-08-20	22779	15639127	78780	686.56	3.46	198.52
19	23802	Elywn	FUSE LINK	Pole # 62	2021-08-28	24374	15481114	53542	635.21	2.20	289.14
20	23750	Dravosburg	FUSE LINK	Pole # 102475	2021-07-13	30215	15451363	61098	511.02	2.02	252.89
21	23860	Wilson	S.S. BREAKER	BREAKER	2021-09-22	28684	13788887	47235	482.04	1.65	291.92
22	23690	Brunot Is.	S.S. BREAKER	BREAKER	2021-09-14	21330	13418062	79284	629.07	3.72	169.24
23	23730	Universal	RECLOSER	ER2	2020-12-24	27423	12629535	53521	492.14	2.13	235.97
24	4107	Wilkinsburg	S.S. BREAKER	BREAKER	2021-07-07	5422	12623130	91351	2328.13	16.85	138.18
25	23661	Crescent	FUSE LINK	Pole # 835	2021-06-06	29773	12200372	59929	409.78	2.01	203.58
26	23880	Rankin	FUSE LINK	Pole # 46	2021-07-08	28995	11962006	152308	404.85	5.22	78.54
27	22177	Universal-Wilkinsburg No.4	S.S. BREAKER	BREAKER	2021-08-13	5787	11960309	119556	2066.75	20.66	100.04

Duquesne Light Company
Third Quarter 2021

Electric Reliability Report

to the

Pennsylvania Public Utility Commission

October 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 third 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 3Q (Rolling 12 mo)	184	0.97	190	*

* 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 third quarter of 2021, Duquesne Light's SAIDI and CAIDI are above both the benchmark and 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. Over the past decade, increases have been observed in the average, minimum, and maximum temperature; wind speed; total inches of precipitation; and the number of days with precipitation. Storm wind speeds have increased over the past decade by approximately 20 mph in both sustained and gust wind speeds: approximately 15 mph to both categories, in the past two years. During the trailing 12 months Duquesne Light has had multiple reported storms impacting our system. Five 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).[1]

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:	7,636,073 KVA
Total KVA-Minutes Interrupted:	1,447,497,121 KVA-Minutes
System Connected Load as of 9/30/21	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

[1] See Docket No. M-2021-3023564, Outage Reports to inform the Commission of utility service outages per 52 PA CODE 67.1

customers (SAIFI) while also focusing on outage duration for customers on these circuits (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).

Third Quarter 2021 Rolling 12 Month Circuit Data

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
1 23610 Findlay Recloser	2 Total Outage(s) Third Quarter Outage(s): • One outage was caused by equipment failure. Previous Outage(s): • One outage was caused by high winds.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2021 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2021.
2 23705 North ~~Recloser~~Fuse Link	4 Total Outages Third Quarter Outage(s): • ~~No outage(s).~~ • One outage was by an unknown cause. Previous Outage(s): • ~~One outage was caused by equipment failure.~~ • Three outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • 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 Q4 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
3 23921 Logan's Ferry Sectionalizer	~~4~~3 Total Outage(s) Third Quarter Outage(s): • ~~Two outages were~~ One outage was caused by tree fall-in Outside ROW. • One outage was ~~due to~~by an unknown cause. Previous Outage(s): • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company plans to perform reliability enhancements, such as installing additional overhead protective devices. • Vegetation Management completed Q4 2020. Proposed for 2024.
4 23707 North Recloser	~~1~~2 Total Outage(s) Third Quarter Outage(s): • No outage(s). 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. • Distribution Overhead Line Inspection was performed in 2017. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2017. Proposed for 2022.
5 23706 North ~~Recloser~~ Fuse Link	4 Total Outage(s) Third Quarter Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • No outage(s). Previous Outage(s): • Three outages were caused by tree fall-in Outside ROW. • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection scheduled for 2021. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
6 23743 Oakland Recloser	~~6~~3 Total Outage(s) Third Quarter Outage(s): ~~• Two outages were caused by tree fall-in Outside ROW.~~ • 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 tree fall-in Inside ROW.~~ • Two outages were caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection was performed in 2018. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2020. Proposed for 2024.
7 23614 Findlay ~~Recloser~~Fuse Link	2 Total Outage(s) Third Quarter Outage(s): ~~• One outage was caused by tree fall-in Inside ROW.~~ • One outage was caused by equipment failure. Previous Outage(s): ~~• One outage was caused by tree fall-in Inside ROW.~~ • One outage was caused by animal contact.	• Permanent repairs were made following each outage as necessary. • The Company plans to perform reliability enhancements, such as installing new switching devices. • Vegetation Management completed Q3 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
8 23868 Wildwood ~~Sectionalizer~~Fuse Link	~~4~~7 Total Outage(s) Third Quarter Outage(s): ~~• One outage was caused by equipment failure.~~ ~~• One outage was caused by contact with vehicle.~~ • One outage due to a storm. Previous Outage(s): ~~• One outage was caused by tree fall-in Outside ROW.~~ • ~~One outage was~~Two outages were caused by high winds. • Four outages were by unknown causes.	• Permanent repairs were made following each outage as necessary. • 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 Q3 2020. Proposed for 2025.
9 23714 Pine Creek Sectionalizer	~~11~~6 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • ~~Six~~Three outages were caused by tree fall-in Outside ROW. • One outage was ~~due to~~by an unknown cause. ~~• Two outages were caused by high winds.~~ • One outage was caused by tree fall-in Inside ROW. • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • 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. Mid-Cycle clearing proposed Q4 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
10 23701 North Fuse Link	~~2~~3 Total Outage(s) Third Quarter Outage(s): ~~• No outage(s).~~ • One outage was by an unknown cause. Previous Outage(s): • One outage was caused by high winds. • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection was performed in 2017. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2016. Proposed for Q4 2021.
11 23700 North ~~Recloser~~ Fuse Link	~~4~~3 Total Outage(s) Third Quarter Outage(s): ~~• Two outages were caused by equipment failure.~~ • No outage(s). Previous Outage(s): • One outage was caused by equipment failure. • ~~One outage was caused~~Two outages were caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2017. Proposed for 2022.
12 23841 Arsenal ~~Recloser~~ Fuse Link	~~4~~2 Total Outage(s) Third Quarter Outage(s): ~~• No outage(s).~~ • One outage was due to a storm. Previous Outage(s): ~~• One outage was caused by tree fall-in Outside ROW.~~ ~~• Two outages were caused by tree fall-in Inside ROW.~~ ~~• One outage was caused by high winds.~~ • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection will be performed in 2017. • The Company plans to perform reliability enhancements, such as reconfiguring switching devices. • Vegetation Management completed Q4 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
13 23816 Bellevue ~~Recloser~~Fuse Link	~~2~~3 Total Outage(s) Third Quarter Outage(s): • ~~Two outages were caused by equipment failure.~~ • No outage(s). Previous Outage(s): • ~~No outage(s).~~ • One outage was caused by contact with company equipment by vehicle. • 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. • Distribution Overhead Line Inspection performed in 2017 with next inspection in 2022, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2018. Proposed for 2023.
14 23869 Wildwood ~~Recloser~~ Breaker	~~5~~4 Total Outage(s) Third Quarter Outage(s): • ~~Two outages were~~One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • ~~Three outages~~Two outages were caused by tree fall-in Outside ROW. • One outage was caused by contact with company equipment by vehicle.	• Permanent repairs were made following each outage as necessary. • 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 Q4 2020. Proposed for 2025.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
15 23694 Brunot Island ~~Sectionalizer~~ Breaker	~~6~~3 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • ~~Four 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.~~ • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection will be performed in 2021 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2018. Proposed for 2022.
16 23745 Oakland ~~Recloser~~ Fuse Link	2 Total Outage(s) Third Quarter Outage(s): • ~~Two outages were caused by tree fall-in Outside ROW.~~ • No outage(s). Previous Outage(s): • ~~No outage(s).~~ • One outage was by an unknown cause. • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2020. Proposed for 2024.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
17 23822 Highland Sectionalizer	~~5~~3 Total Outage(s) Third Quarter Outage(s): • ~~One outage was caused by contact with vehicle.~~ • ~~One outage was caused by a storm.~~ • No outage(s). Previous Outage(s): • One outage was ~~caused by~~due to a storm. • One outage was caused by high winds. • ~~One outage was caused by tree fall-in Inside ROW.~~ • One outage was by an unknown cause.	• Permanent repairs were made following each outage as necessary. • 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 Q3 2019. Proposed for 2023.
18 23709 North ~~Recloser~~ Breaker	3 Total Outage(s) Third Quarter Outage(s): • One outage was ~~due to~~by an unknown cause. Previous Outage(s): • ~~Two outages were~~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. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
19 23802 Elywn ~~Recloser~~Fuse Link	~~5~~1 Total Outage(s) Third Quarter Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • ~~Three outages were caused by storms.~~ • One outage was by an unknown cause. Previous Outage(s): • ~~One outage was caused by equipment failure.~~ • No outage(s).	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2019 with next inspection in 2024, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2020. Proposed for 2024.
20 23750 Dravosburg ~~Recloser~~Fuse Link	~~2~~4 Total Outage(s) Third Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. • ~~One outage was caused by a storm.~~ Previous Outage(s): • ~~No outage(s).~~ • One outage was by an unknown cause. • One outage was caused by high winds. • One outage was due to a storm.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2021 and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
21 23860 Wilson ~~Sectionalizer~~Breaker	~~3~~1 Total Outage(s) Third Quarter Outage(s): • One outage was caused by tree fall-in Inside ROW. • ~~One outage was caused by equipment failure.~~ Previous Outage(s): • ~~One outage was caused by tree fall-in Inside ROW.~~ • No outage(s).	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2019 with next inspection in 2024, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2018. Proposed for 2022.
22 23690 Brunot Island ~~Recloser~~ Breaker	~~3~~5 Total Outage(s) Third Quarter Outage(s): • ~~No outage(s).~~ • One outage was caused by equipment failure. Previous Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • Two outages were by unknown causes. • Two outages were caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • 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 2022.
23 23730 Universal Recloser	3 Total Outage(s) Third Quarter Outage(s): • No outage(s). Previous Outage(s): • Two outages were caused by tree fall-in Outside ROW. • One outage was caused by contact with vehicle.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2018 with next inspection in 2023, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q2 2018. Proposed for 2023.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
24 4107 Wilkinsburg ~~Transformer~~ Breaker	~~6~~3 Total Outage(s) Third Quarter Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • One outage was caused by tree fall-in Inside ROW. • One outage was due to a storm. Previous Outage(s): • ~~Five outages were caused by an overload due to high current.~~ • One outage was caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company performed reliability enhancements in 2021, specifically configuring switching devices. • Vegetation Management completed Q1 2021.
25 23661 Crescent ~~Recloser~~Fuse Link	3 Total Outage(s) Third Quarter Outage(s): • ~~Two outages were caused by tree fall-in Outside ROW.~~ • ~~One outage was caused by a storm.~~ • No outage(s). Previous Outage(s): • ~~No outage(s).~~ • Two outages were by unknown causes. • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • Distribution Overhead Line Inspection performed in 2017 with next inspection in 2022, and all high priority repairs completed. • The Company is investigating reliability enhancements for this circuit. • Vegetation Management completed Q3 2020. Proposed for 2026.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
26 23880 Rankin ~~Sectionalizer~~ Fuse Link	~~5~~3 Total Outage(s) Third Quarter Outage(s): • ~~Three outages were caused by tree fall-in Outside ROW.~~ • One outage was due to a storm. Previous Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • One outage was caused by equipment failure. • One outage was due to a storm.	• Permanent repairs were made following each outage as necessary. • 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 Q4 2017. Proposed for 2022.
27 22177 Universal-Wilkinsburg No.4 ~~Recloser~~Breaker	3 Total Outage(s) Third Quarter Outage(s): • One outage was caused by a storm. • Two outages were caused by tree fall-in Inside ROW. Previous Outage(s): • ~~Two outages were caused by equipment failure.~~ • No outage(s).	• Permanent repairs were made following each outage as necessary. • 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 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.

October 1, 2020 through September 30, 2021

CAUSE	NO. OF OUTAGES	OUTAGE PERCENTAGE	KVA TOTAL	KVA PERCENTAGE	KVA-MINUTE TOTAL	KVA-MINUTE PERCENTAGE
Storms	568	16%	1,355,723	18%	353,761,980	24%
Trees (Inside ROW)	187	5%	405,950	5%	105,077,150	7%
Trees (Outside ROW)	1,139	33%	2,529,348	33%	560,850,870	39%
Equipment Failures	717	21%	1,873,619	25%	259,291,089	18%
Overloads	67	2%	34,600	0%	13,064,490	1%
Vehicles	182	5%	544,096	7%	76,540,113	5%
Contact/Dig In	41	1%	111,379	1%	9,231,073	1%
Animal Contact	109	3%	141,822	2%	10,435,053	1%
Unknown	353	10%	463,875	6%	34,209,607	2%
Other	131	4%	175,661	2%	25,035,696	2%
TOTALS	3,494	100%	7,636,073	100%	1,447,497,121	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 3Q**	**Actual for 2021 3Q**	**3Q Percent Complete**	**Targets for Year 2021**	**Actual YTD for 2021**	**Year End % Complete**
Communications Goals							
Communication Battery Maintenance	Battery Tasks	27	24	89%	108	76	70%
Overhead Distribution Goals							
Recloser Inspections	Circuits	33	24	73%	121	101	83%
Pole Inspections	Poles	6,627	6,964	105%	17,677	14,085	80%
OH Line Inspections	Circuits	33	24	73%	121	101	83%
OH Transformer Inspections	Circuits	33	24	73%	121	101	83%
Padmount & Below Grade Insp	Circuits	0	1	N/A	76	73	96%
Overhead Transmission Goals							
Helicopter Inspections	Circuits	0	0	N/A	11	15	136%
Ground Inspections	Structures	20	0	0%	354	286	81%
Substations Goals							
Circuit Breaker Maintenance	Breaker Tasks	75	40	53%	375	250	67%
Station Transformer Maintenance	Transformer Tasks	0	4	N/A	44	48	109%
Station Battery Maintenance	Battery Tasks	220	215	98%	880	636	72%
Station Relay Maintenance	Relay Tasks	520	135	26%	1,634	721	44%
Station Inspections	Site Visits	465	465	100%	1,860	1,395	75%
Underground Distribution Goals							
Manhole Inspections	Manholes	200	2	1%	700	351	50%
Major Network Insp (Prot Relay)	Network Protectors	20	18	90%	92	48	52%
Minor Network Visual Inspection (Transformer/Protector/Vault)	Network Transformers	190	4	2%	576	426	74%
Underground Transmission Goals							
Pressurization and Cathodic Protection Plant Inspection	Work Orders	94	103	110%	372	285	77%
Vegetation Management Goals							
Overhead Line Clearance	Circuit Overhead Miles	372	329	88%	1,300	925	71%

(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 September 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$14,041,737	$16,891,690	$2,849,953
Human Resources	3,598,793	4,605,537	1,006,744
Operations/Operation Services	16,542,798	17,068,998	526,200
Technology	13,139,247	11,573,247	(1,566,000)
General Corporate*	15,633,747	18,045,320	2,411,573
Total	$62,956,322	$68,184,792	$5,228,470

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

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

	Total Actual	Total Budget	Variance
Customer Service	$41,635,421	$45,310,737	$3,675,316
Human Resources	11,815,205	13,443,992	1,628,787
Operations/Operation Services	52,085,308	53,446,851	1,361,543
Technology	41,093,502	36,466,826	(4,626,676)
General Corporate*	38,213,839	38,532,480	318,641
Total	$184,843,275	$187,200,886	$2,357,611

*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 September 30, 2021
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$2,255,734	$2,768,708	$512,974
Human Resources	3,594,192	3,689,493	95,301
Operations/Operation Services	59,263,670	70,444,850	11,181,180
Technology	7,390,830	10,126,041	2,735,211
General Corporate*	18,552,236	12,060,396	(6,491,840)
Total	$91,056,662	$99,089,488	$8,032,826

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

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

	Total Actual	Total Budget	Variance
Customer Service	$6,048,184	$8,292,183	$2,243,999
Human Resources	11,184,786	10,610,688	(574,098)
Operations/Operation Services	190,935,927	243,356,801	52,420,874
Technology	21,484,736	29,995,453	8,510,717
General Corporate*	37,287,141	25,400,132	(11,887,009)
Total	$266,940,774	$317,655,257	$50,714,483

*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	4
Electronic Technician	15
Telecom Technician	2
Total Telecom	**21**
Electrical Equipment Technician	39
Protection & Control Technician	32
Yard Group Leader	3
Rigger	5
Laborer	2
Total Substation	**81**
UG Splicer	36
UG Cable Inspector	11
Cable Tester	1
Network Operator	13
Equipment Material Handler	1
Total Underground	**62**
Apprentice T&D	15
Equipment Attendant	1
Lineworker	131
Service Crew Leader	4
Equipment Material Handler	4
Total Overhead	**155**
Right of Way Agent	4
Surveyor	4
Total Real Estate	**8**
Total Street Light Changer	**5**
Engineering Technician	47
GIS Technician	7
T&D Mobile Worker	7
Test Technician, Mobile	5
Total Engineering	**66**
Senior Operator Apprentice	61
Senior Operator	29
Troubleshooter	16
Total Senior Operator/Troubleshooter	106
Total Switching Dispatcher	9
Total Employees	**513**

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

CONFIDENTIAL INFORMATION

3rd 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 –3rd Quarter 2021
REDACTED

Amount of Time it Takes to Obtain the Necessary Personnel – 3rd 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 Thimons – General Manager, Asset Management
(412) 393-8639, mthimons@duqlight.com

Jaime Bachota – 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	23610	Findlay	Recloser	WR1181	2021-08-09	21388	34873606	52918	1630.522067	2.47419	659.012169
2	23705	North	Recloser	WR441	2021-06-14	37665	29731349	63519	789.362776	1.686419	468.070167
3	23921	Logans Ferry	Sectionalizer	EA1155	2021-08-29	30891	27322249	86724	874.753834	2.757871	315.048302
4	23707	North	Recloser	WR409	2021-06-14	24830	23835427	39061	959.944703	1.573137	610.210363
5	23706	North	Recloser	WR368	2021-07-13	32220	23314668	99114	723.608565	3.076163	235.230825
6	23743	Oakland	Recloser	ER99	2021-07-01	29193	22434830	96864	773.433756	3.342822	231.611641
7	23614	Findlay	Recloser	WR634	2021-08-14	27879	21043687	50432	754.82216	1.80896	417.268539
8	23868	Wildwood	Sectionalizer	WA741	2021-08-30	33034	20762695	163062	628.525004	4.936186	127.330064
9	23714	Pine Creek	Sectionalizer	WA609	2021-06-04	32875	20160527	160970	613.247969	4.896425	125.244001
10	23701	North	Fuse link	40K	2021-06-22	20760	20086467	48144	967.556213	2.319074	417.216413
11	23700	North	Recloser	WR470	2021-08-12	20734	18691951	80698	901.512057	3.89206	231.628425
12	23841	Arsenal	Recloser	WR1060	2021-06-14	35930	18362698	59035	511.911063	1.657616	311.047649
13	23816	Bellevue	Recloser	WR750	2021-09-30	22512	17775431	26734	789.598035	1.187543	664.89979
14	23869	Wildwood	Recloser	WR706	2021-08-30	24841	16983400	103356	683.684231	4.160701	164.319439
15	23694	Brunot Is.	Sectionalizer	WA432	2021-06-13	28410	16835730	89964	592.598732	3.166631	187.138522
16	23745	Oakland	Recloser	R100	2021-07-08	29485	16550929	15377	561.575233	0.522754	1076.343174
17	23822	Highland	Sectionalizer	EA138	2021-08-13	28072	15829942	84452	569.517654	3.045189	187.443068
18	23709	North	Recloser	WR409	2021-08-20	22779	15639127	78780	686.558978	3.458447	198.516463
19	23802	Elywn	Recloser	ER282	2021-08-13	24374	15481114	53542	635.206735	2.197102	289.139628
20	23750	Dravosburg	Recloser	ER152	2021-07-13	30215	15451363	61098	511.015933	2.020527	252.894742
21	23860	Wilson	Sectionalizer	EA94	2021-09-22	28684	13788887	47235	482.037119	1.647912	291.920969
22	23690	Brunot Is.	Recloser	WR394	2021-06-13	21330	13418062	79284	629.069947	3.717018	169.240477
23	23730	Universal	Recloser	ER2	2020-12-25	27423	12629535	53521	492.135113	2.132495	235.973449
24	4107	Wilkinsburg	Transformer	No Device	2021-08-18	5422	12623130	91351	2328.131684	16.84821	138.182723
25	23661	Crescent	Recloser	WR603	2021-08-29	29773	12200372	59929	409.779732	2.012863	203.580436
26	23880	Rankin	Sectionalizer	EA95	2021-07-08	28995	11962006	152308	404.85316	5.216618	78.538264
27	22177	Universal-Wilkinsburg No.4	Recloser	SEN1042	2021-01-08	5787	11960309	119556	2066.754622	20.659409	100.039387

AMENDED

Rank	Circuit No	Circuit Name	Equipment Type	Device	Last Lockout	Ckt KVA	Total KVA Min Interrupted	Total KVA Interrupted	SAIDI	SAIFI	CAIDI
1	23610	Findlay	RECLOSER	WR1181	2021-08-09	21388	34873606	52918	1630.52	2.47	659.01
2	23705	North	FUSE LINK	Pole # 264273	2021-07-23	37665	29731349	63519	789.36	1.69	468.07
3	23921	Logans Ferry	SECTIONALIZER	EA1155	2021-08-29	30891	27322249	86724	874.75	2.76	315.05
4	23707	North	RECLOSER	WR381	2021-06-13	24830	23835427	39061	959.94	1.57	610.21
5	23706	North	FUSE LINK	Pole # 99838	2021-06-14	32220	23314668	99114	723.61	3.08	235.23
6	23743	Oakland	RECLOSER	ER754	2021-08-12	29193	22434830	96864	773.43	3.34	231.61
7	23614	Findlay	FUSE LINK	Pole # 341159	2021-09-22	27879	21043687	50432	754.82	1.81	417.27
8	23868	Wildwood	FUSE LINK	Pole # 602115	2021-08-29	33034	20762695	163062	628.53	4.94	127.33
9	23714	Pine Creek	SECTIONALIZER	WA609	2021-03-28	32875	20160527	160970	613.25	4.90	125.24
10	23701	North	FUSE LINK	Pole # 265954	2021-07-18	20760	20086467	48144	967.56	2.32	417.22
11	23700	North	FUSE LINK	Pole # 267585	2021-06-22	20734	18691951	80698	901.51	3.89	231.63
12	23841	Arsenal	FUSE LINK	Pole # 8979	2021-08-13	35930	18362698	59035	511.91	1.66	311.05
13	23816	Bellevue	FUSE LINK	Pole # 61519	2020-11-30	22512	17775431	26734	789.60	1.19	664.90
14	23869	Wildwood	S.S. BREAKER	BREAKER	2021-08-29	24841	16983400	103356	683.68	4.16	164.32
15	23694	Brunot Is.	S.S. BREAKER	BREAKER	2021-06-29	28410	16835730	89964	592.60	3.17	187.14
16	23745	Oakland	FUSE LINK	Pole # 49921	2021-06-14	29485	16550929	15377	561.58	0.52	1076.34
17	23822	Highland	SECTIONALIZER	EA138	2021-05-13	28072	15829942	84452	569.52	3.05	187.44
18	23709	North	S.S. BREAKER	BREAKER	2021-08-20	22779	15639127	78780	686.56	3.46	198.52
19	23802	Elywn	FUSE LINK	Pole # 62	2021-08-28	24374	15481114	53542	635.21	2.20	289.14
20	23750	Dravosburg	FUSE LINK	Pole # 102475	2021-07-13	30215	15451363	61098	511.02	2.02	252.89
21	23860	Wilson	S.S. BREAKER	BREAKER	2021-09-22	28684	13788887	47235	482.04	1.65	291.92
22	23690	Brunot Is.	S.S. BREAKER	BREAKER	2021-09-14	21330	13418062	79284	629.07	3.72	169.24
23	23730	Universal	RECLOSER	ER2	2020-12-24	27423	12629535	53521	492.14	2.13	235.97
24	4107	Wilkinsburg	S.S. BREAKER	BREAKER	2021-07-07	5422	12623130	91351	2328.13	16.85	138.18
25	23661	Crescent	FUSE LINK	Pole # 835	2021-06-06	29773	12200372	59929	409.78	2.01	203.58
26	23880	Rankin	FUSE LINK	Pole # 46	2021-07-08	28995	11962006	152308	404.85	5.22	78.54
27	22177	Universal-Wilkinsburg No.4	S.S. BREAKER	BREAKER	2021-08-13	5787	11960309	119556	2066.75	20.66	100.04