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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 – 4th Quarter 2020
Docket No. M-2016-2522508

Dear Secretary Chiavetta:

Enclosed please find an amended Quarterly Electric Reliability Report for the fourth quarter of 2020 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
Fourth Quarter 2020

Electric Reliability Report

to the

Pennsylvania Public Utility Commission

February 1, 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 fourth quarter of 2020.

(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	*
2020 4Q (Rolling 12 mo)	111	0.84	132	*

* Sufficient information to calculate MAIFI is unavailable.

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: (excludes the 4/8/20 Major Event that is listed below)	6,493,992 KVA
Total KVA-Minutes Interrupted: (excludes the 4/8/20 Major Event that is listed below)	856,410,563 KVA-Minutes
System Connected Load as of 12/30/20	7,722,291 KVA
April 8, 2020 Major Event	772,911 KVA (10% of System Load) 302,912,154 KVA-Minutes

(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).

Fourth Quarter 2020 Rolling 12 Month Circuit Data

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
1 23714 Pine Creek Sectionalizer	6 Total Outage(s) Fourth Quarter Outage(s): • Two outages were caused by tree fall-in Outside ROW. Previous Outage(s): • Three outages were 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. • The Company is preparing a scope of work to improve the reliability of this circuit. • Vegetation Management completed Q4 2018. Proposed for 2023.
2 23921 Logan's Ferry Fuse Link	2 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by wires wrapping together that caused a short circuit. Previous Outage(s): • One outage was caused by lightning.	• 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. • The Company has issued a work order to install additional lateral fusing. • Vegetation Management completed Q4 2020. Proposed for 2024.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
3 23646 Wolfe Run Sectionalizer	2 Total Outage(s) Fourth 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. • 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.
4 22869 Midland Cooks Ferry Fuse Link	2 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. • 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. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2019 and all high priority repairs completed. • The Company issued a fusing scope of work in Q4 2019 and is currently being engineered. • The Company issued a reliability related scope of work in Q3 2020 as a result of Q2 2020 review. • Vegetation Management completed Q3 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
5 23706 North Sectionalizer	3 Total Outage(s) Fourth 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 contact with company equipment by vehicle.	• 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. • The Company has completed a coordination review and is preparing a scope of work to install and replace necessary protective equipment. • Vegetation Management completed Q3 2018. Proposed for 2022.
6 23882 Rankin Breaker	3 Total Outage(s) Fourth 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.	• 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 Q1 2017. Proposed for 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
7 23681 Woodville Breaker	2 Total Outage(s) Fourth 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 2019 and all high priority repairs completed. • Vegetation Management completed Q2 2016. Proposed for 2021.
8 23718 Pine Creek Breaker	1 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). 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 2019 and all high priority repairs completed. • Vegetation Management completed Q3 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
9 23660 Crescent Fuse Link	3 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • Three 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 2020 and all high priority repairs completed. • The Company issued a fusing scope of work in Q4 2020 as a result of the protection coordination review. • The Company has issued a scope of work in Q4 2020 for construction of a circuit tie to improve reliability. • Vegetation Management completed Q4 2020. Proposed for 2026.
10 23614 Findlay Recloser	2 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by tree fall-in Inside ROW. Previous Outage(s): • One outage was caused by lightning.	• 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. • Vegetation Management proposed for 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
11 23880 Rankin Sectionalizer	3 Total Outage(s) Fourth Quarter Outage(s): • 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 contact by company contract personnel.	• 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.
12 23870 Mt. Nebo Fuse Link	3 Total Outage(s) Fourth 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 2017 and all high priority repairs completed. • The Company issued a fusing scope of work in Q4 2020 as a result of a protection coordination review. • The Company issued a scope for work in Q4 2020 for additional sectionalizing devices to improve reliability. • Vegetation Management completed Q4 2017. Proposed for 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
13 23902 Plum Fuse Link	4 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • Two outages were caused by equipment failure. • One outage was caused by tree fall-in Outside ROW. • One outage was caused by tree fall-in Inside 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 2021.
14 23661 Crescent Breaker	4 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by tree fall-in Inside ROW. • Three 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. • The Company issued a fusing scope of work in Q3 2020. • Vegetation Management completed Q4 2020. Proposed for 2025.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
15 23953 Evergreen Fuse Link	2 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by high winds. • One outage was due to storms.	• 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 reviewing coordination of fuses and protective devices. • Vegetation Management completed Q2016. Proposed for 2021.
16 23670 Montour Recloser	5 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • Three outages were 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 scheduled for 2021. • The Company completed a fusing project in Q3 2020. • The Company issued a scope of work in Q1 2020 for construction of a circuit tie to improve reliability that is currently being engineered. • Vegetation Management completed Q1 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
17 23732 Universal Breaker	2 Total Outage(s) Fourth 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 2017 and all high priority repairs completed. • The Company is preparing a scope of work to install protective fuses. • Vegetation Management completed Q4 2017. Proposed for 2021.
18 23783 Valley Breaker	5 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by tree fall-in Inside ROW. • One outage was caused by equipment failure. • One outage was by an unknown cause. • One outage was caused by high current. • One outage was caused by contact with company equipment by vehicle.	• 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. • The Company issued a reliability-related scope of work in Q3 2020 as a result of Q2 2020 review. • Vegetation Management completed Q1 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
19 4845 Fairview Breaker	4 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by tree fall-in Outside ROW. • One outage was caused by a tornado. • One outage was due to a storm. • 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. • The Company issued a scope of work in Q4 2020 for additional fusing and construction of a circuit tie. • Vegetation Management completed Q4 2018. Proposed for 2023.
20 23694 Brunot Island Fuse Link	3 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • Three 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. • Vegetation Management completed Q4 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
21 23867 Wildwood Fuse Link	3 Total Outage(s) Fourth Quarter Outage(s): • One outage was by an unknown cause. 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 performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2020. Proposed for 2025.
22 23862 Wilson Recloser	1 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by wires wrapping together causing a short circuit. 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 2018 and all high priority repairs completed. • Vegetation Management completed Q4 2019. Proposed for 2023.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
23 23716 Pine Creek Fuse Link	2 Total Outage(s) Fourth 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 2019 and all high priority repairs completed. • The Company is issuing a scope of work to install a circuit tie. • Vegetation Management completed Q1 2019. Proposed for 2023.
24 23711 Pine Creek Fuse Link	4 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by contact with customer equipment by a customer, employee, or contractor. Previous 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 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 2018 and all high priority repairs completed. • Vegetation Management completed Q4 2015. Proposed for 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
25 23769 Bryn Mawr Fuse Link	3 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • Two 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. • 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 2019. Proposed for 2024.
26 23645 Wolfe Run Fuse Link	2 Total Outage(s) Fourth Quarter Outage(s): • Two outages were 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 2020 and all high priority repairs completed. • Vegetation Management completed Q3 2018. Proposed for 2024.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
27 23640 Midland Fuse Link	3 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by equipment failure. 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. • The Company issued a reliability-related scope of work in Q3 2020 as a result of Q2 2020 review. • Vegetation Management completed Q4 2018. Proposed for 2023.

(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.

January 1, 2020 through December 31, 2020 minus
One PUC Major Event Exclusion that occurred on April 8, 2020

CAUSE	NO. OF OUTAGES	OUTAGE PERCENTAGE	KVA TOTAL	KVA PERCENTAGE	KVA-MINUTE TOTAL	KVA-MINUTE PERCENTAGE
Storms	355	11%	821,646	13%	165,562,092	19%
Trees (Inside ROW)	116	4%	189,168	3%	28,718,615	3%
Trees (Outside ROW)	976	30%	1,922,922	30%	320,872,960	38%
Equipment Failures	796	25%	2,058,415	32%	214,318,630	25%
Overloads	143	4%	48,247	1%	4,883,590	1%
Vehicles	161	5%	461,542	7%	50,387,390	6%
Contact/Dig In	40	1%	93,551	1%	7,147,194	1%
Animal Contact	109	3%	231,249	3%	9,070,343	1%
Unknown	361	1%	443,482	7%	28,239,286	3%
Other	162	6%	223,770	3%	27,210,463	3%
TOTALS	3,219	100%	6,493,992	100%	856,410,563	100%

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

2020 Transmission and Distribution Goals and Objectives							
Program Project	**Unit of Measurement**	**Target for 2020 4Q**	**Actual for 2020 4Q**	**4Q Percent Complete**	**Targets for Year 2020**	**Actual YTD for 2020**	**Year End % Complete**
Communications Goals							
Communication Battery Maintenance	Battery Tasks	27	27	100%	108	108	100%
Overhead Distribution Goals							
Recloser Inspections	Circuits	18	6	33%	121	123	102%
Pole Inspections	Poles	4,417	8,027	182%	17,677	17,781	101%
OH Line Inspections	Circuits	18	6	33%	121	123	102%
OH Transformer Inspections	Circuits	18	6	33%	121	123	102%
Padmount & Below Grade Insp	Circuits	0	10	N/A	76	81	107%
Overhead Transmission Goals							
Helicopter Inspections	Number of Circuits	0	0	N/A	11	15	136%
Ground Inspections	Number of Structures	20	4	N/A	354	354	100%
Substations Goals							
Circuit Breaker Maintenance	Breaker Tasks	62	38	61%	364	399	110%
Station Transformer Maintenance	Transformer Tasks	0	22	N/A	44	48	109%
Station Battery Maintenance	Battery Tasks	220	231	105%	880	876	100%
Station Relay Maintenance	Relay Tasks	293	463	158%	1,392	1,466	105%
Station Inspections	Site Visits	465	465	100%	1,860	1,860	100%
Underground Distribution Goals							
Manhole Inspections	Manholes	147	318	46%	700	718	103%
Major Network Insp (Prot Relay)	Network Protectors	0	34	0%	94	96	102%
Minor Network Visual Inspection (Transformer/Protector/Vault)	Network Transformers	0	36	0%	572	578	101%
Underground Transmission Goals							
Pressurization and Cathodic Protection Plant Inspection	Work Orders	90	101	112%	372	380	102%
Vegetation Management Goals							
Overhead Line Clearance	Circuit Overhead Miles	308	242	79%	1,300	1,315	101%

(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 December 31, 2020
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$17,645,441	$17,028,035	($617,406)
Human Resources	3,316,089	4,381,657	1,065,568
Operations/Operation Services	16,542,686	17,530,486	987,800
Technology	12,487,752	12,247,424	(240,328)
General Corporate*	10,808,112	10,669,965	(138,147)
Total	$60,800,080	$61,857,567	$1,057,487

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

Budget Variance Recap – O&M Expenses
Year to Date through December 31, 2020
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$67,258,455	$63,550,719	($3,707,736)
Human Resources	14,967,355	17,681,460	2,714,105
Operations/Operation Services	70,609,491	72,541,174	1,931,683
Technology	51,827,528	51,606,888	(220,640)
General Corporate*	49,163,375	44,196,002	(4,967,373)
Total	$253,826,204	$249,576,243	($4,249,961)

*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 December 31, 2020
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$2,217,963	$2,319,171	$101,208
Human Resources	3,456,565	3,782,368	325,803
Operations/Operation Services	69,461,444	86,631,912	17,170,468
Technology	11,465,190	8,618,933	(2,846,257)
General Corporate*	13,045,988	8,572,764	(4,473,224)
Total	$99,647,150	$109,925,148	$10,277,998

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

Budget Variance Recap - Capital
Year to Date through December 31, 2020
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$8,335,032	$9,312,390	$977,358
Human Resources	12,062,243	14,450,685	2,388,442
Operations/Operation Services	264,688,100	331,483,020	66,794,920
Technology	34,547,205	35,270,847	723,642
General Corporate*	51,595,337	45,065,026	(6,530,311)
Total	$371,227,917	$435,581,968	$64,354,051

*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	6
Electronic Technician	16
Telecom Technician	2
Total Telecom	**24**
Electrical Equipment Technician	36
Protection & Control Technician	34
Yard Group Leader	3
Rigger	5
Laborer	2
Total Substation	**80**
UG Splicer	36
UG Cable Inspector	10
Cable Tester	1
Network Operator	13
Equipment Material Handler	1
Total Underground	**61**
Apprentice T&D	32
Equipment Attendant	0
Lineworker	123
Service Crew Leader	3
Equipment Material Handler	6
Total Overhead	**165**
Right of Way Agent	4
Surveyor	4
Total Real Estate	**8**
Total Street Light Changer	**6**
Engineering Technician	43
GIS Technician	7
T&D Mobile Worker	6
Test Technician, Mobile	6
Total Engineering	**62**
Senior Operator Apprentice	34
Senior Operator	26
Troubleshooter	22
Total Traveling Operator/Troubleshooter	**82**
Total Switching Dispatcher	**10**
Total Employees	**498**

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

CONFIDENTIAL INFORMATION

4th Quarter 2020

Contractor Dollars: REDACTED
Contractor Hours: REDACTED

YTD 2020

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 –4th Quarter 2020
REDACTED

Amount of Time it Takes to Obtain the Necessary Personnel – 4th Quarter 2020
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 – General Manager, Asset Management
(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.*

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	2020-12-17	32875	31649770	141697	962.73	4.31	223.36
2	23921	Logans Ferry	FUSE LINK	Pole # 51310	2020-10-14	32499	24957190	58576	767.94	1.80	426.07
3	23646	Wolfe Run	SECTIONALIZER	WA483	2020-08-27	36176	19315157	74972	533.92	2.07	257.63
4	22869	Midland-Cooks Ferry	FUSE LINK	Pole # 129477	2020-12-01	37666	17530956	134802	465.43	3.58	130.05
5	23706	North	SECTIONALIZER	WA832	2020-11-15	32220	16197656	137787	502.72	4.28	117.56
6	23882	Rankin	S.S. BREAKER	BREAKER	2020-12-11	25319	15360643	105334	606.68	4.16	145.83
7	23681	Woodville	S.S. BREAKER	BREAKER	2020-11-15	32960	14008535	88618	425.02	2.69	158.08
8	23718	Pine Creek	S.S. BREAKER	BREAKER	2020-08-27	22338	13137465	25736	588.12	1.15	510.47
9	23660	Crescent	FUSE LINK	Pole # 337147	2020-07-11	31831	12566590	93983	394.79	2.95	133.71
10	23614	Findlay	RECLOSER	WR634	2020-12-22	27879	12150157	79850	435.82	2.86	152.16
11	23880	Rankin	SECTIONALIZER	EA95	2020-12-24	32388	11676466	48677	360.52	1.50	239.88
12	23870	Mt. Nebo	FUSE LINK	Pole # 71871	2020-11-16	33392	11468108	62042	343.44	1.86	184.84
13	23902	Plum	FUSE LINK	Pole # 259201	2020-08-28	33092	11116807	147007	335.94	4.44	75.62
14	23661	Crescent	S.S. BREAKER	BREAKER	2020-08-27	29773	10977811	103992	368.72	3.49	105.56
15	23953	Evergreen	FUSE LINK	Pole # 273470	2020-08-28	31030	10463451	67227	337.20	2.17	155.64
16	23670	Montour	S.S. BREAKER	BREAKER	2020-12-26	34595	10444303	61708	301.90	1.78	169.25
17	23732	Universal	S.S. BREAKER	BREAKER	2020-11-15	22516	10121493	117626	449.52	5.22	86.05
18	23783	Valley	S.S. BREAKER	BREAKER	2020-08-05	35257	10034172	113117	284.60	3.21	88.71
19	4845	Fairview	S.S. BREAKER	BREAKER	2020-06-19	7876	9630872	43630	1222.81	5.54	220.74
20	23694	Brunot Is.	FUSE LINK	Pole # 5634	2020-06-21	28410	9430837	50568	331.95	1.78	186.50
21	23867	Wildwood	FUSE LINK	Pole # 310	2020-12-16	32745	9130247	85968	278.83	2.63	106.21
22	23862	Wilson	RECLOSER	ER663	2020-12-17	37316	8964327	40645	240.23	1.09	220.55
23	23716	Pine Creek	FUSE LINK	Pole # 136228	2020-12-01	35398	8957877	75970	253.06	2.15	117.91
24	23711	Pine Creek	FUSE LINK	Pole # 38219	2020-10-13	22021	8496107	65060	385.82	2.95	130.59
25	23769	Bryn Mawr	FUSE LINK	Pole # 139808	2020-06-10	24071	8421494	24923	349.86	1.04	337.90
26	23645	Wolfe Run	FUSE LINK	Pole # 311844	2020-12-04	34670	8333189	66539	240.36	1.92	125.24
27	23640	Midland	FUSE LINK	Pole # 125426	2020-10-20	31306	8267410	28981	264.08	0.93	285.27

Duquesne Light Company
Fourth Quarter 2020

Electric Reliability Report

to the

Pennsylvania Public Utility Commission

February 1, 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 fourth quarter of 2020.

(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	*
2020 4Q (Rolling 12 mo)	111	0.84	132	*

* Sufficient information to calculate MAIFI is unavailable.

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: (excludes the 4/8/20 Major Event that is listed below)	6,493,992 KVA
Total KVA-Minutes Interrupted: (excludes the 4/8/20 Major Event that is listed below)	856,410,563 KVA-Minutes
System Connected Load as of 12/30/20	7,722,291 KVA
April 8, 2020 Major Event	772,911 KVA (10% of System Load) 302,912,154 KVA-Minutes

(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).

Fourth Quarter 2020 Rolling 12 Month Circuit Data

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
1 23714 Pine Creek ~~Recloser~~Sectionalizer	~~7~~6 Total Outage(s) Fourth Quarter Outage(s): • ~~One outage was~~Two outages were caused by tree fall-in Outside ROW. Previous Outage(s): • Three outages were caused by tree fall-in Outside ROW. • ~~Two outages were~~ One outage was caused by equipment failure. • ~~One outage was caused by contact with company equipment by vehicle.~~	• 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 preparing a scope of work to improve the reliability of this circuit. • Vegetation Management completed Q4 2018. Proposed for 2023.
2 23921 Logan's Ferry ~~Recloser~~ Fuse Link	~~4~~2 Total Outage(s) Fourth Quarter Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • One outage was caused by wires wrapping together that caused a short circuit. Previous Outage(s): • ~~Three outages were caused by a storm.~~ • One outage was caused by lightning.	• 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. • The Company has issued a work order to install additional lateral fusing. • Vegetation Management completed Q4 2020. Proposed for 2024.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
3 23646 Wolfe Run Sectionalizer	2 Total Outage(s) Fourth 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. • 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.
4 22869 Midland Cooks Ferry ~~Recloser~~ Fuse Link	~~5~~2 Total Outage(s) Fourth Quarter 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).~~ Previous Outage(s): • ~~Two outages were caused by tree fall-in Outside ROW.~~ • ~~Two outages were caused by equipment failure.~~ • ~~One outage was caused by contact with company equipment by vehicle.~~ • 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 2019 and all high priority repairs completed. • The Company issued a fusing scope of work in Q4 2019 and is currently being engineered. • The Company issued a reliability related scope of work in Q3 2020 as a result of Q2 2020 review. • Vegetation Management completed Q3 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
5 23706 North ~~Recloser~~ Sectionalizer	~~5~~3 Total Outage(s) Fourth 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. • ~~Two outages were~~One outage was caused by contact with company equipment by vehicle. • ~~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 scheduled for 2021. • The Company has completed a coordination review and is preparing a scope of work to install and replace necessary protective equipment. • Vegetation Management completed Q3 2018. Proposed for 2022.
6 23882 Rankin ~~Recloser~~ Breaker	~~4~~3 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by contact with company equipment by vehicle. • ~~No outage(s).~~ Previous Outage(s): • ~~One outage was caused by outside contractor work.~~ • ~~One outage was caused by equipment failure.~~ • ~~One outage was caused by wires wrapped together.~~ • ~~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 2020 and all high priority repairs completed. • Vegetation Management completed Q1 2017. Proposed for 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
7 23681 Woodville ~~Recloser~~ Breaker	~~3~~2 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • ~~Two outages were~~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 2019 and all high priority repairs completed. • Vegetation Management completed Q2 2016. Proposed for 2021.
8 23718 Pine Creek ~~S.S.~~ Breaker	1 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). 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 2019 and all high priority repairs completed. • Vegetation Management completed Q3 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
9 23660 Crescent ~~Sectionalizer~~ Fuse Link	~~4~~3 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • ~~Four~~Three 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 2020 and all high priority repairs completed. • The Company issued a fusing scope of work in Q4 2020 as a result of the protection coordination review. • The Company has issued a scope of work in Q4 2020 for construction of a circuit tie to improve reliability. • Vegetation Management completed Q4 2020. Proposed for 2026.
10 23614 Findlay Recloser	~~3~~2 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by tree fall-in Inside ROW. Previous Outage(s): • ~~One outage was caused by tree fall-in Outside ROW~~. • One outage was caused by lightning.	• 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. • Vegetation Management proposed for 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
11 23880 Rankin Sectionalizer	3 Total Outage(s) Fourth Quarter Outage(s): • 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 contact by company contract ~~equipment~~personnel.	• 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.
12 23870 Mt. Nebo ~~Sectionalizer~~ Fuse Link	3 Total Outage(s) Fourth Quarter Outage(s): ~~• No outage(s).~~ ~~Previous Outage(s):~~ • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): ~~• Two outages were caused by equipment failure.~~ • 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. • The Company issued a fusing scope of work in Q4 2020 as a result of a protection coordination review. • The Company issued a scope for work in Q4 2020 for additional sectionalizing devices to improve reliability. • Vegetation Management completed Q4 2017. Proposed for 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
13 ~~23903~~ 23902 Plum Fuse Link	~~34~~ Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • ~~One outage was by an unknown cause.~~ • ~~One outage was caused by contact with animal.~~ • ~~One outage was caused by contact with contractor equipment.~~ • Two outages were caused by equipment failure. • One outage was caused by tree fall-in Outside ROW. • One outage was caused by tree fall-in Inside 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 2021.
14 23661 Crescent ~~Recloser~~ Breaker	~~34~~ Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • ~~One outage was by an unknown cause.~~ • One outage was caused by tree fall-in Inside ROW. • ~~One outage was~~Three 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. • The Company issued a fusing scope of work in Q3 2020. • Vegetation Management completed Q4 2020. Proposed for 2025.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
15 23953 Evergreen Fuse Link	~~3~~2 Total Outage(s) Fourth Quarter Outage(s): • ~~One outage was caused by equipment failure.~~ • No outage(s). Previous Outage(s): • ~~Two outages were~~One outage was caused by high winds. • One outage was due to storms.	• 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 reviewing coordination of fuses and protective devices. • Vegetation Management completed Q2016. Proposed for 2021.
16 23670 Montour Recloser	~~4~~5 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • ~~Two~~ Three outages were 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 scheduled for 2021. • The Company completed a fusing project in Q3 2020. • The Company issued a scope of work in Q1 2020 for construction of a circuit tie to improve reliability that is currently being engineered. • Vegetation Management completed Q1 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
17 23732 Universal ~~Sectionalizer~~Breaker	~~6~~2 Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • ~~Four outages were caused by high winds.~~ • ~~One outage was caused by equipment failure.~~ • 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 2017 and all high priority repairs completed. • The Company is preparing a scope of work to install protective fuses. • Vegetation Management completed Q4 2017. Proposed for 2021.
18 23783 Valley ~~Sectionalizer~~Breaker	~~3~~5 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by tree fall-in Inside ROW. • One outage was caused by equipment failure. • One outage was by an unknown cause. • One outage was caused by high current. • One outage was caused by contact with company equipment by vehicle.	• 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. • The Company issued a reliability-related scope of work in Q3 2020 as a result of Q2 2020 review. • Vegetation Management completed Q1 2017. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
19 4845 Fairview ~~Recloser~~Breaker	~~1~~4 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by tree fall-in Outside ROW. • One outage was caused by a tornado. • One outage was due to a storm. • 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. • The Company issued a scope of work in Q4 2020 for additional fusing and construction of a circuit tie. • Vegetation Management completed Q4 2018. Proposed for 2023.
20 23694 Brunot Island ~~Sectionalizer~~Fuse Link	~~4~~3 Total Outage(s) Fourth Quarter Outage(s): • ~~Three outages were caused by tree fall-in Outside ROW.~~ • ~~One outage was caused by equipment failure~~. • No outage(s). Previous Outage(s): • ~~No outage(s).~~ • Three 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. • Vegetation Management completed Q4 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
21 23867 Wildwood ~~Recloser~~ Fuse Link	~~23~~ Total Outage(s) Fourth Quarter Outage(s): • ~~No outage(s).~~ • One outage was by an unknown cause. Previous Outage(s): • ~~One outage was caused by equipment failure.~~ • ~~One outage was caused by contact with company equipment by vehicle.~~ • 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 performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q4 2020. Proposed for 2025.
22 23862 Wilson ~~Sectionalizer~~Recloser	~~21~~ Total Outage(s) Fourth Quarter Outage(s): • One outage was caused by wires wrapping together causing a short circuit. • ~~No outage(s).~~ Previous Outage(s): • ~~One outage was caused by storm.~~ • ~~One outage was caused by wires wrapping.~~ • 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 2018 and all high priority repairs completed. • Vegetation Management completed Q4 2019. Proposed for 2023.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
23 23716 Pine Creek ~~Recloser~~Fuse Link	2 Total Outage(s) Fourth Quarter Outage(s): • ~~Two outages were by an unknown cause.~~ • One outage was caused by tree fall-in Outside ROW. Previous Outage(s): • ~~No 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 2019 and all high priority repairs completed. • The Company is issuing a scope of work to install a circuit tie. • Vegetation Management completed Q1 2019. Proposed for 2023.
24 23711 Pine Creek ~~Recloser~~Fuse Link	~~3~~4 Total Outage(s) Fourth Quarter Outage(s): • ~~No outage(s).~~ • One outage was caused by contact with customer equipment by a customer, employee, or contractor. Previous Outage(s): • ~~Three outages were~~One outage was caused by tree fall-in Outside ROW. • 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. • 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 2015. Proposed for 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
25 23769 Bryn Mawr ~~Recloser~~Fuse Link	~~2~~3 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • ~~One outage was~~ Two outages were caused by tree fall-in Outside ROW. • ~~One outage 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 performed in 2018 and all high priority repairs completed. • Vegetation Management completed Q4 2019. Proposed for 2024.
26 23645 Wolfe Run ~~Sectionalizer~~ Fuse Link	~~3~~2 Total Outage(s) Fourth Quarter Outage(s): • ~~One outage was caused by tree fall-in Outside ROW.~~ • Two outages were caused by equipment failure. Previous Outage(s): • ~~One outage was caused by equipment failure.~~ • ~~One outage was caused by tree fall-in Outside 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 2020 and all high priority repairs completed. • Vegetation Management completed Q3 2018. Proposed for 2024.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
27 23640 Midland ~~Recloser~~Fuse Link	~~2~~3 Total Outage(s) Fourth Quarter Outage(s): • ~~No outage(s).~~ • One outage was caused by equipment failure. Previous Outage(s): • ~~Two outages were caused by storms.~~ • 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. • The Company issued a reliability-related scope of work in Q3 2020 as a result of Q2 2020 review. • Vegetation Management completed Q4 2018. Proposed for 2023.

(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.

January 1, 2020 through December 31, 2020 minus
One PUC Major Event Exclusion that occurred on April 8, 2020

CAUSE	NO. OF OUTAGES	OUTAGE PERCENTAGE	KVA TOTAL	KVA PERCENTAGE	KVA-MINUTE TOTAL	KVA-MINUTE PERCENTAGE
Storms	355	11%	821,646	13%	165,562,092	19%
Trees (Inside ROW)	116	4%	189,168	3%	28,718,615	3%
Trees (Outside ROW)	976	30%	1,922,922	30%	320,872,960	38%
Equipment Failures	796	25%	2,058,415	32%	214,318,630	25%
Overloads	143	4%	48,247	1%	4,883,590	1%
Vehicles	161	5%	461,542	7%	50,387,390	6%
Contact/Dig In	40	1%	93,551	1%	7,147,194	1%
Animal Contact	109	3%	231,249	3%	9,070,343	1%
Unknown	361	1%	443,482	7%	28,239,286	3%
Other	162	6%	223,770	3%	27,210,463	3%
TOTALS	3,219	100%	6,493,992	100%	856,410,563	100%

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

2020 Transmission and Distribution Goals and Objectives							
Program Project	**Unit of Measurement**	**Target for 2020 4Q**	**Actual for 2020 4Q**	**4Q Percent Complete**	**Targets for Year 2020**	**Actual YTD for 2020**	**Year End % Complete**
Communications Goals							
Communication Battery Maintenance	Battery Tasks	27	27	100%	108	108	100%
Overhead Distribution Goals							
Recloser Inspections	Circuits	18	6	33%	121	123	102%
Pole Inspections	Poles	4,417	8,027	182%	17,677	17,781	101%
OH Line Inspections	Circuits	18	6	33%	121	123	102%
OH Transformer Inspections	Circuits	18	6	33%	121	123	102%
Padmount & Below Grade Insp	Circuits	0	10	N/A	76	81	107%
Overhead Transmission Goals							
Helicopter Inspections	Number of Circuits	0	0	N/A	11	15	136%
Ground Inspections	Number of Structures	20	4	N/A	354	354	100%
Substations Goals							
Circuit Breaker Maintenance	Breaker Tasks	62	38	61%	364	399	110%
Station Transformer Maintenance	Transformer Tasks	0	22	N/A	44	48	109%
Station Battery Maintenance	Battery Tasks	220	231	105%	880	876	100%
Station Relay Maintenance	Relay Tasks	293	463	158%	1,392	1,466	105%
Station Inspections	Site Visits	465	465	100%	1,860	1,860	100%
Underground Distribution Goals							
Manhole Inspections	Manholes	147	318	46%	700	718	103%
Major Network Insp (Prot Relay)	Network Protectors	0	34	0%	94	96	102%
Minor Network Visual Inspection (Transformer/Protector/Vault)	Network Transformers	0	36	0%	572	578	101%
Underground Transmission Goals							
Pressurization and Cathodic Protection Plant Inspection	Work Orders	90	101	112%	372	380	102%
Vegetation Management Goals							
Overhead Line Clearance	Circuit Overhead Miles	308	242	79%	1,300	1,315	101%

(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 December 31, 2020
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$17,645,441	$17,028,035	($617,406)
Human Resources	3,316,089	4,381,657	1,065,568
Operations/Operation Services	16,542,686	17,530,486	987,800
Technology	12,487,752	12,247,424	(240,328)
General Corporate*	10,808,112	10,669,965	(138,147)
Total	$60,800,080	$61,857,567	$1,057,487

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

Budget Variance Recap – O&M Expenses
Year to Date through December 31, 2020
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$67,258,455	$63,550,719	($3,707,736)
Human Resources	14,967,355	17,681,460	2,714,105
Operations/Operation Services	70,609,491	72,541,174	1,931,683
Technology	51,827,528	51,606,888	(220,640)
General Corporate*	49,163,375	44,196,002	(4,967,373)
Total	$253,826,204	$249,576,243	($4,249,961)

*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 December 31, 2020
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$2,217,963	$2,319,171	$101,208
Human Resources	3,456,565	3,782,368	325,803
Operations/Operation Services	69,461,444	86,631,912	17,170,468
Technology	11,465,190	8,618,933	(2,846,257)
General Corporate*	13,045,988	8,572,764	(4,473,224)
Total	$99,647,150	$109,925,148	$10,277,998

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

Budget Variance Recap - Capital
Year to Date through December 31, 2020
(In Whole Dollars)
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	$8,335,032	$9,312,390	$977,358
Human Resources	12,062,243	14,450,685	2,388,442
Operations/Operation Services	264,688,100	331,483,020	66,794,920
Technology	34,547,205	35,270,847	723,642
General Corporate*	51,595,337	45,065,026	(6,530,311)
Total	$371,227,917	$435,581,968	$64,354,051

*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	6
Electronic Technician	16
Telecom Technician	2
Total Telecom	**24**
Electrical Equipment Technician	36
Protection & Control Technician	34
Yard Group Leader	3
Rigger	5
Laborer	2
Total Substation	**80**
UG Splicer	36
UG Cable Inspector	10
Cable Tester	1
Network Operator	13
Equipment Material Handler	1
Total Underground	**61**
Apprentice T&D	32
Equipment Attendant	0
Lineworker	123
Service Crew Leader	3
Equipment Material Handler	6
Total Overhead	**165**
Right of Way Agent	4
Surveyor	4
Total Real Estate	**8**
Total Street Light Changer	**6**
Engineering Technician	43
GIS Technician	7
T&D Mobile Worker	6
Test Technician, Mobile	6
Total Engineering	**62**
Senior Operator Apprentice	34
Senior Operator	26
Troubleshooter	22
Total Traveling Operator/Troubleshooter	**82**
Total Switching Dispatcher	**10**
Total Employees	**498**

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

CONFIDENTIAL INFORMATION

4th Quarter 2020

Contractor Dollars: REDACTED
Contractor Hours: REDACTED

YTD 2020

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 –4th Quarter 2020
REDACTED

Amount of Time it Takes to Obtain the Necessary Personnel – 4th Quarter 2020
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 – General Manager, Asset Management
(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	KVA-Min Interrupted	KVA Interrupted	SAIDI	SAIFI	CAIDI
1	23714	Pine Creek	Recloser	WR976	11/22/2020	32875	31649770	141697	962.73	4.31	223.36
2	23921	Logans Ferry	Recloser	ER230	11/15/2020	32499	24957190	58576	767.94	1.80	426.07
3	23646	Wolfe Run	Sectionalizer	WA483	8/28/2020	36176	19315157	74972	533.92	2.07	257.63
4	22869	Midland-Cooks Ferry	Recloser	WR874	7/10/2020	37666	17530956	134802	465.43	3.58	130.05
5	23706	North	Recloser	WR459	11/15/2020	32220	16197656	137787	502.72	4.28	117.56
6	23882	Rankin	Recloser	ER52	8/28/2020	25319	15360643	105334	606.68	4.16	145.83
7	23681	Woodville	Recloser	ER316	11/15/2020	32960	14008535	88618	425.02	2.69	158.08
8	23718	Pine Creek	Recloser	WR1000	8/28/2020	22338	13137465	25736	588.12	1.15	510.47
9	23660	Crescent	Sectionalizer	WA555	8/25/2020	31831	12566590	93983	394.79	2.95	133.71
10	23614	Findlay	Recloser	WR634	12/22/2020	27879	12150157	79850	435.82	2.86	152.16
11	23880	Rankin	Sectionalizer	EA95	12/24/2020	32388	11676466	48677	360.52	1.50	239.88
12	23870	Mt. Nebo	Recloser	WR299	8/23/2020	33392	11465758	62017	343.37	1.86	184.88
13	23902	Plum	Fuse link	80E	7/12/2020	33092	11116807	147007	335.94	4.44	75.62
14	23661	Crescent	Recloser	WR604	5/26/2020	29773	10977811	103992	368.72	3.49	105.56
15	23953	Evergreen	Fuse link	80E	12/17/2020	31030	10463451	67227	337.20	2.17	155.64
16	23670	Montour	Recloser	ER254	12/26/2020	34595	10444303	61708	301.90	1.78	169.25
17	23732	Universal	Sectionalizer	EA45	11/16/2020	22516	10121493	117626	449.52	5.22	86.05
18	23783	Valley	Sectionalizer	WA225	5/29/2020	35257	10034172	113117	284.60	3.21	88.71
19	4845	Fairview	Fuse link	65K	9/30/2020	7876	9630872	43630	1222.81	5.54	220.74
20	23694	Brunot Is.	Sectionalizer	WA432	11/15/2020	28410	9430837	50568	331.95	1.78	186.50
21	23867	Wildwood	Recloser	WR731	8/14/2020	32745	9130247	85968	278.83	2.63	106.21
22	23862	Wilson	Sectionalizer	EA1146	12/17/2020	37316	8964327	40645	240.23	1.09	220.55
23	23716	Pine Creek	Recloser	WR384	11/12/2020	35398	8957877	75970	253.06	2.15	117.91
24	23711	Pine Creek	Recloser	WR391	8/15/2020	22021	8496107	65060	385.82	2.95	130.59
25	23769	Bryn Mawr	Recloser	ER112	6/11/2020	24071	8421494	24923	349.86	1.04	337.90
26	23645	Wolfe Run	Sectionalizer	WA732	11/15/2020	34670	8333189	66539	240.36	1.92	125.24
27	23640	Midland	Recloser	WR595	6/11/2020	31306	8267410	28981	264.08	0.93	285.27

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	2020-12-17	32875	31649770	141697	962.73	4.31	223.36
2	23921	Logans Ferry	FUSE LINK	Pole # 51310	2020-10-14	32499	24957190	58576	767.94	1.80	426.07
3	23646	Wolfe Run	SECTIONALIZER	WA483	2020-08-27	36176	19315157	74972	533.92	2.07	257.63
4	22869	Midland-Cooks Ferry	FUSE LINK	Pole # 129477	2020-12-01	37666	17530956	134802	465.43	3.58	130.05
5	23706	North	SECTIONALIZER	WA832	2020-11-15	32220	16197656	137787	502.72	4.28	117.56
6	23882	Rankin	S.S. BREAKER	BREAKER	2020-12-11	25319	15360643	105334	606.68	4.16	145.83
7	23681	Woodville	S.S. BREAKER	BREAKER	2020-11-15	32960	14008535	88618	425.02	2.69	158.08
8	23718	Pine Creek	S.S. BREAKER	BREAKER	2020-08-27	22338	13137465	25736	588.12	1.15	510.47
9	23660	Crescent	FUSE LINK	Pole # 337147	2020-07-11	31831	12566590	93983	394.79	2.95	133.71
10	23614	Findlay	RECLOSER	WR634	2020-12-22	27879	12150157	79850	435.82	2.86	152.16
11	23880	Rankin	SECTIONALIZER	EA95	2020-12-24	32388	11676466	48677	360.52	1.50	239.88
12	23870	Mt. Nebo	FUSE LINK	Pole # 71871	2020-11-16	33392	11468108	62042	343.44	1.86	184.84
13	23902	Plum	FUSE LINK	Pole # 259201	2020-08-28	33092	11116807	147007	335.94	4.44	75.62
14	23661	Crescent	S.S. BREAKER	BREAKER	2020-08-27	29773	10977811	103992	368.72	3.49	105.56
15	23953	Evergreen	FUSE LINK	Pole # 273470	2020-08-28	31030	10463451	67227	337.20	2.17	155.64
16	23670	Montour	S.S. BREAKER	BREAKER	2020-12-26	34595	10444303	61708	301.90	1.78	169.25
17	23732	Universal	S.S. BREAKER	BREAKER	2020-11-15	22516	10121493	117626	449.52	5.22	86.05
18	23783	Valley	S.S. BREAKER	BREAKER	2020-08-05	35257	10034172	113117	284.60	3.21	88.71
19	4845	Fairview	S.S. BREAKER	BREAKER	2020-06-19	7876	9630872	43630	1222.81	5.54	220.74
20	23694	Brunot Is.	FUSE LINK	Pole # 5634	2020-06-21	28410	9430837	50568	331.95	1.78	186.50
21	23867	Wildwood	FUSE LINK	Pole # 310	2020-12-16	32745	9130247	85968	278.83	2.63	106.21
22	23862	Wilson	RECLOSER	ER663	2020-12-17	37316	8964327	40645	240.23	1.09	220.55
23	23716	Pine Creek	FUSE LINK	Pole # 136228	2020-12-01	35398	8957877	75970	253.06	2.15	117.91
24	23711	Pine Creek	FUSE LINK	Pole # 38219	2020-10-13	22021	8496107	65060	385.82	2.95	130.59
25	23769	Bryn Mawr	FUSE LINK	Pole # 139808	2020-06-10	24071	8421494	24923	349.86	1.04	337.90
26	23645	Wolfe Run	FUSE LINK	Pole # 311844	2020-12-04	34670	8333189	66539	240.36	1.92	125.24
27	23640	Midland	FUSE LINK	Pole # 125426	2020-10-20	31306	8267410	28981	264.08	0.93	285.27