Lindsay A. Baxter
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April 29, 2021

VIA ELECTRONIC FILING

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 2020 Annual Electric Reliability Report
Docket No. M-2016-2522508

Dear Secretary Chiavetta:

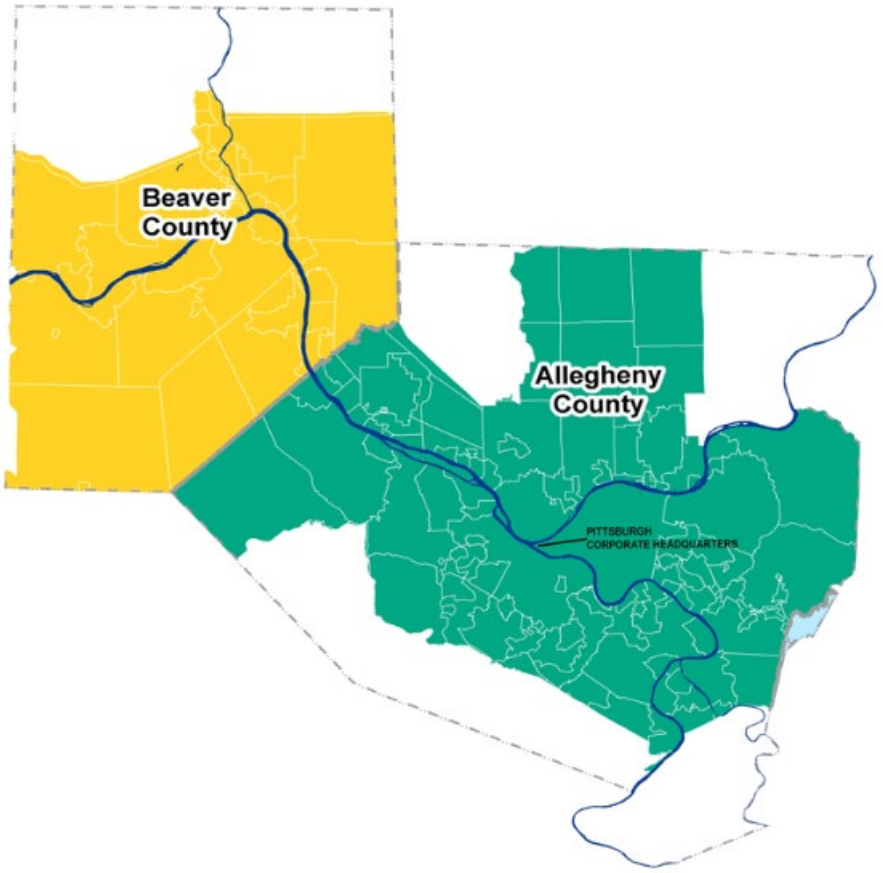
Please find enclosed for filing Duquesne Light Company's 2020 Annual Electric Reliability Report.

Upon receipt, if you have any questions regarding the information contained in this filing, please contact me or Chris Johnson at cljohnson@duqlight.com or 412-393-6496.

Sincerely,

Lindsay A. Baxter
Manager, Regulatory and Clean Energy Strategy

Enclosure
Cc (w/ enc.):
Bureau of Technical Utility Services (dsearfoorc@pa.gov, jvanzant@pa.gov)
Office of Consumer Advocate (TMcCloskey@paoca.org)
Office of Small Business Advocate (sgray@pa.gov, swebb@pa.gov)



2020 Annual Electric Reliability Report

to the

Pennsylvania Public Utility Commission

Duquesne Light Company
411 Seventh Avenue
Pittsburgh, PA 15219

April 30, 2021

DUQUESNE LIGHT COMPANY
ANNUAL ELECTRIC RELIABILITY REPORT

Filed April 30, 2021

52 Pa Code §57.195 Reporting Requirements

(a)(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

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

(b)(1) An overall current assessment of the state of the system reliability in the electric distribution company's service territory including a discussion of the electric distribution company's current programs and procedures for providing reliable electric service.

Duquesne Light Company's ("Duquesne Light" or "the Company") service territory covers approximately 817 square miles, with a well-developed distribution system throughout. Electric service reliability remains very consistent across the service territory. The combination of an effective outage restoration process and significant distribution automation allows the Company to quickly restore power to large numbers of customers in outage situations.

Achieving outstanding performance in system reliability continues to be one of Duquesne Light's most important long-term objectives. The Asset Management and System Planning Groups perform ongoing analysis of reliability indices, root cause analysis of outages, and tracking and monitoring of other performance measures to identify improvement opportunities and optimize reliability. This long-term process includes making recommendations for capital projects such as circuit rehabilitation, new substations, and distribution circuits. It also includes implementation of new advanced protection and coordination schemes on the distribution system that better localize customer outages and reduce momentary outages.

Duquesne Light continues its Emergent Work Process, which is used to identify problems, set priorities, and resolve reliability issues as quickly as possible. Each day, field personnel perform field inspections and any abnormalities are logged into a database. This database is reviewed regularly and any high priority problems are identified and a course of action is determined. Analysis at the device level is used to identify small areas where customers have experienced multiple outages. Assessing only system level or even circuit level data may mask these isolated problems.

Scheduled preventative and predictive maintenance activities continue to reduce the potential for future service interruptions. Corrective maintenance is prioritized with the objective to reduce backlog in the most cost-efficient manner.

Several capital budget projects in 2020 targeted distribution reliability improvements, including pole replacement, substation rehabilitation, circuit load relief and voltage improvement, URD rehabilitation, circuit rearrangement, and installation of additional automated remotely controlled pole top devices.

Specific programs, procedures, and ongoing maintenance activities that support Duquesne Light's commitment to service reliability include:

- A Distribution Overhead Line Inspection Program, which includes infrared inspections, that systematically identifies circuit problems for remedial action in advance of failure.

- A Rights-of-Way Vegetation Management Maintenance Program with the goal of reducing tree and branch failures through proactive pruning and removal to manage proper clearances. Duquesne Light believes that this program will help reduce the frequency of outages by addressing targeted tree failure conditions that typically result in physical damage to our facilities.

- An all pulse-reclosing protection technology has been implemented on some 23kV circuits. This technology eliminates traditional "hard reclosing," thereby making it easier and faster to conduct repairs and restore circuits to normal operation, enabling customers to be restored more quickly. This technology also reduces stress and damage on the entire circuit since the breaker is no longer required to trip, also contributing to the reduction in momentary outages to customers.

- Line maintenance work of various types is regularly performed in order to maintain distribution plant. This work includes replacement of cross arms, arrestors, insulators, and other equipment on the overhead system as well as inspections and remedial work on the underground system.

- Storm Preparedness Training is conducted each year and Storm Review Meetings are held following major events. These meetings focus on the successes and failures of the most recent emergency service restoration effort. Service restoration process improvements are made as needed to improve response time and effectiveness during the next restoration effort.

Finally, the Company continues to implement its Long-Term Infrastructure Improvement Plan (LTIIP) approved April 20, 2017[1] to accelerate its infrastructure program. In 2020, the Commission completed its periodic review of Duquesne Light's LTIIP, finding that the plan is "designed adequately to ensure and maintain safe, adequate, reasonable, and reliable service and that DLC has substantially adhered to its plan."[2]

[1] Petition of Duquesne Light Company for Approval of Its Long-Term Infrastructure Improvement Plan for period January 1, 2017 through December 31, 2022, Docket No. P-2016-2540046.
[2] Final Order issued October 29, 2020. Docket No. M-2020-3019708.

(b)(2) A description of each major event that occurred during the year being reported on, 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.

Duquesne Light had one major event that occurred on Wednesday, April 8, 2020. A total of 60,383 customers were affected throughout the course of this storm event, constituting 10% of the 603,313 total customers in Duquesne Light's service territory.

At approximately 0100 hours on Wednesday, April 8, 2020, strong thunderstorms with heavy rains and high winds, moved through Duquesne Light's service territory in Allegheny and Beaver counties, causing downed trees on power lines and damage to poles and equipment. Service was restored to the last affected customer on Saturday, April 11, 2020 at 1808 hours.

This high wind event ranked among the top four in customer outages over the past decade for Duquesne Light. A confirmed tornado by the National Weather Service (NWS) crossed through our service area in Beaver County. The borough of Ohioville in Beaver County experienced straight line wind damage. The NWS also reported the highest wind speed during this storm was 60 mph and the highest wind gust was 75 mph.

Please see Duquesne Light's Electric Utility Report of Outage, dated April 24, 2020, and Duquesne Light's Major Event Exclusion Report, dated April 30, 2020, for more information regarding this outage event.

(b)(3) A table showing the actual values of each of the reliability indices (SAIFI, CAIDI, SAIDI, and if available, MAIFI) for the electric distribution company's service territory for each of the preceding 3 calendar years. The report shall include the data used in calculating the indices, namely the average number of customers served, the number of sustained customer minutes interruptions, the number of customers affected, and the minutes of interruption. If MAIFI values are provided, the number of customer momentary interruptions shall also be reported.

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

	SAIDI	SAIFI	CAIDI	MAIFI
2018	**89**	**0.84**	**106**	*
2019	**106**	**1.01**	**106**	*
2020	111	0.84	132	*
3 Year Average	102	0.9	115	*
Benchmark	126	1.17	108	*

* 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.

In 2020, Duquesne Light's SAIDI and SAIFI performance were both below benchmark and standard. CAIDI performance in 2020 missed the standard by two points (1.2%). This is the first time since at least 2004 that Duquesne Light has missed the standard for one of its reliability metrics. The increase in CAIDI is primarily attributable to weather impacts. During 2020, the Company experienced three weather events that resulted in significant customer outages of greater than 40,000 customers, which is just below the threshold for an excludable event (10% of customers or 60,000 customers). Duquesne Light targets achieving reliability performance in 2021 that is within all three reliability standards.

As a result of improved data accuracy governance that has been put in place at Duquesne Light, minor changes were made to outage data subsequent to the filing of applicable 2020 Quarterly Reliability Reports. These changes are reflected in the table below. It is important to note that none of these data revisions had an effect on Duquesne Light's overall SAIDI, SAIFI, or CAIDI performance in 2020.

Incident #		New Values		Original Values		Difference	
	Date	kVA	kVA-Min	kVA	kVA-Min	kVA	kVA-Min
2051305	3/29/2020	25	2,350	0	0	25	2,350
2053052	7/5/2020	0	0	225	38,250	-225	-38,250
2053461	7/11/2020	167	37,241	0	0	167	37,241
2054616*	8/28/2020	0	0	565	35,868	-565	-35,868
2043964*	8/28/2020	27,533	4,067,670	27,553	2,963,090	-20	1,104,580
					Total	**-618**	**1,070,053**

* A revised PUC Report of Electric Outage was previously submitted.

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

2020

Total KVA Interrupted for the Period: (excludes the 4/8/20 Major Event that is listed below)	6,493,374 KVA
Total KVA-Minutes Interrupted: (excludes the 4/8/20 Major Event that is listed below)	857,480,616 KVA-Minutes
System Connected Load as of 12/31/20	7,722,291 KVA
April 8, 2020 Major Event	772,911 KVA (10% of System Load) 302,912,154 KVA-Minutes

2019

Total KVA Interrupted for the Period: (excluding 2/24/19 Major Event)	7,296,110 KVA
Total KVA-Minutes Interrupted: (excluding 2/24/19 Major Event)	772,081,564 KVA-Minutes
System Connected Load as of 12/31/19:	7,259,129 KVA
February 24, 2019 Major Event:	1,682,200 KVA (23% of System Load) 784,246,585 KVA-Minutes

2018

Total KVA Interrupted for the Period: (excluding 11/15/18 Major Event)	6,086,512 KVA
Total KVA-Minutes Interrupted: (excluding 11/15/18 Major Event)	646,765,080 KVA-Minutes
System Connected Load as of 12/31/18:	7,259,129 KVA
November 15, 2018 Major Event:	760,135 KVA (10.5% of System Load) 316,283,090 KVA-Minutes

(b)(4) A breakdown and analysis of outage causes during the year being reported on, including the number and percentage of service outages 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.

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%	1,922,902	30%	321,977,540	38%
Equipment Failures	796	25%	2,058,415	32%	214,355,871	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	11%	443,482	7%	28,239,286	3%
Other	160	6%	223,005	3%	27,138,695	3%
TOTALS	3,217	100%	6,493,374	100%	857,480,616	100%

(b)(5) A list of remedial efforts taken to date and planned for circuits that have been on the worst performing 5% of circuits list for a year or more.

Duquesne Light has five circuits that have been on the worst performing 5% of circuits list for four consecutive quarters. The majority of these circuits have received remedial actions or are scheduled for maintenance activities in 2021 that are expected to improve their reliability. The Company will continue to monitor these circuits closely during 2021 to verify that the remedial actions taken have been successful and that reliability has improved. Many of the circuits have already shown improvement as indicated in the following detailed descriptions.

Duquesne uses a sophisticated automated protection system on its 23kV circuits, which utilizes numerous 3-phase sectionalizers and reclosers on the main feeders and as ties to adjacent circuits. This automation technology with remote control generally allows circuit problems to be isolated and rerouted in less than five minutes. Generally, only a small portion of the customers on a worst performing circuit experience reliability issues.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
1 23714 Pine Creek Recloser	7 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. • Two outages were 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 investigating reliability enhancements for this circuit. • Vegetation Management completed Q4 2018. Proposed for 2023.
2 23921 Logan's Ferry Recloser	4 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 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 2017 and all high priority repairs completed. • The Company plans to update the coordination of protective devices. • The Company plans to perform reliability enhancements, such as additional lateral fusing. Vegetation Management completed Q4 2020. Proposed for 2024.
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.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
4 22869 Midland Cooks Ferry Recloser	5 Total Outage(s) Fourth Quarter Outage(s): • 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.	• 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 completed updating the coordination of protective devices, such as fuses, in the first half of 2021. • The Company plans to perform reliability enhancements, such as pole replacement and conductor upgrades. • Vegetation Management completed Q3 2017. Proposed for 2022.
5 23706 North Recloser	5 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 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 performed in 2020 and all high priority repairs completed. • The Company plans to update the coordination of protective devices including fuses. • The Company plans to perform reliability enhancements, such as installing protective device upgrades. • Vegetation Management completed Q3 2018. Proposed for 2022.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
6 23882 Rankin Recloser	4 Total Outage(s) Fourth Quarter Outage(s): • 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 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.
7 23681 Woodville Recloser	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 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	4 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • Four 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 plans to update the coordination of protective devices including fuses. • The Company plans to perform reliability enhancements, such as installing a new circuit tie. • Vegetation Management completed Q4 2020. Proposed for 2026.
10 23614 Findlay Recloser	3 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. • The Company plans to perform reliability enhancements, such as installing new switching devices. • Vegetation Management proposed for 2021.
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.	• 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.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
12 23870 Mt. Nebo Sectionalizer	3 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by tree fall-in Outside ROW. • Two outages were caused by equipment failure.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2017 and all high priority repairs completed. • The Company plans to update the coordination of protective devices including fuses. • The Company plans to perform reliability enhancements, such as installing new switching devices. • Vegetation Management completed Q4 2017. Proposed for 2021.
13 23903 Plum Fuse Link	3 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.	• 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	3 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 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 completed updating the coordination of protective devices, such as fuses, in the first half of 2021. • Vegetation Management completed Q4 2020. Proposed for 2025.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
15 23953 Evergreen 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 high winds.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 2020 and all high priority repairs completed. • Vegetation Management completed Q2 2016. Proposed for 2021.
16 23670 Montour Recloser	4 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. • 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 updating the coordination of protective devices, such as fuses, in the first half of 2021. • The Company plans to perform reliability enhancements, such as installing a new circuit tie. • Vegetation Management completed Q1 2018. Proposed for 2022.
17 23732 Universal Sectionalizer	6 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.	• 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 plans to update the coordination of protective devices including fuses. • Vegetation Management completed Q4 2017. Proposed for 2021.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
18 23783 Valley Sectionalizer	3 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.	• 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 plans to update the coordination of protective devices including fuses. • The Company plans to perform reliability enhancements, such as installing new switching devices. • Vegetation Management completed Q1 2017. Proposed for 2022.
19 4845 Fairview Recloser	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 2017 and all high priority repairs completed. • The Company plans to perform reliability enhancements, such as installing a new circuit tie. • Vegetation Management completed Q4 2018. Proposed for 2023.
20 23694 Brunot Island Sectionalizer	4 Total Outage(s) Fourth Quarter Outage(s): • Three outages were caused by tree fall-in Outside ROW. • One outage was caused by equipment failure. Previous Outage(s): • No outage(s).	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection 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	2 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • 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. • Vegetation Management completed Q4 2020. Proposed for 2025.
22 23862 Wilson Sectionalizer	2 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • One outage was caused by storm. • One outage was caused by wires wrapping.	• 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.
23 23716 Pine Creek Recloser	2 Total Outage(s) Fourth Quarter Outage(s): • Two outages were by an unknown cause. 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 plans to perform reliability enhancements, such as installing a new circuit tie. • Vegetation Management completed Q1 2019. Proposed for 2023.

Rank, Circuit Name, Device	Outages	Remedial Actions Planned or Taken
24 23711 Pine Creek Recloser	3 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • 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 2018 and all high priority repairs completed. • Vegetation Management completed Q4 2015. Proposed for 2021.
25 23769 Bryn Mawr Recloser	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 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 2018 and all high priority repairs completed. • Vegetation Management completed Q4 2019. Proposed for 2024.
26 23645 Wolfe Run 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 equipment failure. • One outage was caused by tree fall-in Outside ROW.	• Permanent repairs were made following each outage as necessary. • The Company will continue to monitor this circuit for reliability issues. • Distribution Overhead Line Inspection performed in 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	2 Total Outage(s) Fourth Quarter Outage(s): • No outage(s). Previous Outage(s): • Two outages were caused by 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 2017 and all high priority repairs completed. • The Company plans to update the coordination of protective devices including fuses. • The Company plans to perform reliability enhancements, such as installing new switching devices. • Vegetation Management completed Q4 2018. Proposed for 2023.

(b)(6) A comparison of established transmission and distribution inspection and maintenance goals/objectives versus actual results achieved during the year being reported on. Explanations of any variances shall be included.

2020 Transmission and Distribution Goals and Objectives

Program Project	**Unit of Measurement**	**Target for 2020**	**Year End Actuals for 2020**	**Percent Complete**
Communications Goals				
Communication Battery Maintenance	Batteries	108	108	100%
Overhead Distribution Goals				
Recloser Inspections	Circuits	121	123	102%
Pole Inspections	Poles	17,677	17,781	101%
OH Line Inspections	Circuits	121	123	102%
OH Transformer Inspections	Circuits	121	123	102%
Padmount & Below Grade Insp	Circuits	76	81	107%
Overhead Transmission Goals				
Helicopter Inspections[3]	Circuits	11	15	136%
Ground Inspections	Number of Structures	354	354	100%
Substations Goals				
Circuit Breaker Maintenance	Breakers	364	399	110%
Station Transformer Maintenance	Transformers	44	48	109%
Station Battery Maintenance[4]	Batteries	880	876	100%
Station Relay Maintenance	Relays	1,392	1,466	105%
Station Inspections	Sites	1,860	1,860	100%
Underground Distribution Goals				
Manhole Inspections	Manholes	700	718	103%
Major Network Insp (Prot Relay)	Ntwk Protectors	94	96	102%
Minor Network Visual Inspection (Transformer/Protector/Vault)	Ntwk Transformers	572	578	101%
Underground Transmission Goals				
Pressurization and Cathodic Protection Plant Inspection	Work Orders	372	380	102%
Vegetation Management Goals				
Overhead Line Clearance	Circuit Overhead Miles	1,300	1,315	101%

[3] Inspections are selected on a circuit basis; the selected circuits accounted for a higher overall circuit count in 2020 than projected.
[4] Goal based on four inspections annually per battery; regulation requires three inspections annually. Compliance obligation achieved for all batteries.

(b)(7) A comparison of budgeted versus actual transmission and distribution operation and maintenance expenses for the year being reported on. Explanations of any variances shall be included.

Budget Variance Recap – O&M Expenses
For the Twelve Months Ending December 31, 2020
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	71,926,417	68,751,176	(3,175,241)
Human Resources	15,554,959	17,681,460	2,126,501
Operations/Operation Services	69,180,790	73,279,937	4,099,147
Technology	51,362,762	51,606,888	244,126
General Corporate*	43,932,787	38,256,782	(5,676,005)
Total	251,957,715	249,576,243	(2,381,472)

* Includes Finance, Office of General Counsel, and Senior Management Costs

The O&M expense overspend for the twelve months ended December 31, 2020 is attributable to higher bad debt expense due to the COVID-19 pandemic (Customer Service) and ancillary transmission spend (General Corporate), partially offset by lower medical benefits claims below historical trends (Human Resources) and decreased Vegetation Management expenses, Third Party Attachment transfer requests, and Field Survey project costs (Operations).

(b)(8) A comparison of budgeted versus actual transmission and distribution capital expenditures for the year being reported on. Explanations of any variances shall be included.

Budget Variance Recap – Capital
For the Twelve Months Ending December 31, 2020
Favorable/(Unfavorable)

	Total Actual	Total Budget	Variance
Customer Service	8,337,432	9,312,390	974,958
Human Resources	12,870,786	14,450,685	1,579,899
Operations/Operation Services	274,902,834	338,026,056	63,123,222
Technology	34,506,593	35,270,847	764,254
General Corporate*	38,385,311	38,521,990	136,679
Total	369,002,956	435,581,968	66,579,012

* Includes Finance, Office of General Counsel, and Senior Management Costs

The capital expense underspend for the twelve months ended December 31, 2020 is attributable to lower than budgeted capital expenditures associated with shifted work scope for Transmission projects due to generation deactivations and delays in projects driven by COVID-19 (Operations) and lower medical benefits claims below historical trends (Human Resources).

(b)(9) Quantified transmission and distribution inspection and maintenance goals/objectives for the current calendar year detailed by system area (i.e., transmission, substation, and distribution).

2021 Transmission and Distribution Goals and Objectives

Program Project	**Unit of Measurement**	**Target for Year 2021**
Communications Goals		
Communication Battery Maintenance	Batteries	108
Overhead Distribution Goals		
Recloser Inspections	Circuits	121
Pole Inspections	Poles	17,677
OH Line Inspections	Circuits	121
OH Transformer Inspections	Circuits	121
Padmount & Below Grade Insp	Circuits	76
Overhead Transmission Goals		
Helicopter Inspections	Circuits	11
Ground Inspections	Number of Structures	354
Substations Goals		
Circuit Breaker Maintenance	Breakers	375
Station Transformer Maintenance	Transformers	44
Station Battery Maintenance	Batteries	880
Station Relay Maintenance	Relays	1,634
Station Inspections	Sites	1,860
Underground Distribution Goals		
Manhole Inspections	Manholes	700
Major Network Insp (Prot Relay)	Network Protectors	92
Minor Network Visual Inspection (Transformer/Protector/Vault)	Network Transformers	576
Underground Transmission Goals		
Pressurization and Cathodic Protection Plant Inspection	Work Orders	372
Vegetation Management Goals		
Overhead Line Clearance	Circuit Overhead Miles	1,300

(b)(10) Budgeted transmission and distribution operation and maintenance expenses for the current year in total and detailed by FERC account.

	Total Budget
Customer Service	68,515,807
Human Resources	18,970,371
Operations/ Operation Services	69,895,460
Technology	47,218,483
General Corporate*	44,789,539
Total	249,389,660

*Includes Finance, Office of General Counsel, and Senior Management Costs

(b)(11) Budgeted transmission and distribution capital expenditures for the current year in total and detailed by FERC account.

	Total Budget
Customer Service	11,034,238
Human Resources	14,379,031
Operations/ Operation Services	331,650,415
Technology	40,096,396
General Corporate*	26,783,171
Total	423,943,251

*Includes Finance, Office of General Counsel, and Senior Management Costs

(b)(12) Significant changes, if any, to the transmission and distribution inspection and maintenance programs previously submitted to the Commission.

Duquesne Light has not made any significant changes to its transmission and distribution inspection and maintenance programs.