Duquesne Light
Our Energy...Your Power

Gary A. Jack
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L-00030161

April 27, 2011

VIA OVERNIGHT MAIL DELIVERY
Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
P.O. Box 3265
Harrisburg, Pennsylvania 17105-3265

Re: Duquesne Light Company – 2010 Annual Reliability Report

Dear Secretary Chiavetta:

Enclosed for filing please find an original and six (6) copies of Duquesne Light Company's Annual Reliability Report for the calendar year 2010, as required by 52 Pa. Code §57.195.

If you have any questions regarding the information provided, please contact me at (412) 393-3662.

Sincerely,

Gary A. Jack

Enclosures

c: Mr. W. Williams – Bureau of CEEP
Mr. I. A. Popowsky – Office of Consumer Advocate
Mr. W. R. Lloyd, Jr. – Office of Small Business Advocate
Mr. D. Gill – Bureau of CEEP
Mr. B. J. Loper – Bureau of CEEP

DUQUESNE LIGHT COMPANY
2010 ANNUAL RELIABILITY REPORT

Filed April 27, 2011

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.

Pamela Niehaus - Manager, Engineering Services
(412) 393-8446, pniehaus@duqlight.com

Gary Jack - Manager, Governmental Affairs
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(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 service territory covers approximately 800 square miles, with a well-developed distribution system throughout. Electric service reliability is fairly 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's long-term objectives. The Engineering and Planning Group performs ongoing analysis of reliability indices, root cause analysis of outages, and tracking and monitoring of other performance measures. This is the long-term process to optimize reliability and to identify improvement opportunities. This includes making recommendations for capital projects such as circuit rehabilitation, new substations and distribution circuits.

An Emergent Work Process is used to identify problems, set priorities, and resolve issues as quickly as possible. Each day, field personnel perform field inspections and any abnormalities are logged into a database. This database is reviewed every two weeks by the Emergent Work Team and any high priority problems are identified and a course of action is determined. In addition, any device that has operated four or more times in the previous six months is identified. Analysis at the device level is used to identify small areas where customers have experienced multiple outages. System level and even circuit level indices may mask these isolated problems. This is the short-term process for real-time analysis and reliability improvement.

(b)(1) **Continued**

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

Several capital budget projects target 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's commitment to excellent service reliability include:

- An Infrared and Ultrasound Inspection Program that systemically identifies circuit and substation problems for remedial action in advance of failure.
- A comprehensive Vegetation Management Program, which is designed to provide long-term line clearance, deters future growth and achieves optimum cycle for trimming. All of the Company's circuits are included in a multi-year Vegetation Management maintenance program. The impact on SAIDI and SAIFI due to tree-related outages continues to trend positively.
- An ongoing long-term Sectionalizer Maintenance and Replacement Program serves to refurbish and maintain reliable operation of all automatic and remote controllable switches on Duquesne's automated distribution system, and to replace those that are no longer operating efficiently.
- A comprehensive Substation Rehabilitation Program targets improvements in delivery system substation facilities including replacement of deteriorated and obsolete transformers, breakers, switches, relays, regulators and other equipment.
- Lateral fusing on 23KV distribution circuits is an ongoing initiative. Installing fuses on single phase and three phase overhead taps reduces the number of customers affected by an outage and improves reliability.
- New distribution substations are being installed between existing major substations to take advantage of transmission reliability, decrease distribution circuit exposure and improve reliability to end users.
- 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.

(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.**

Major Event February 5, 2010

On Friday, February 5, 2010, at approximately 1800 hours, heavy snow started falling in our service area in Allegheny and Beaver counties. This heavy, wet snow continued to fall, causing limbs and trees to break and fall into our power lines, resulting in service disruptions to our customers. The heavy snowfall and impassable roads made it difficult for our responders to initially assess damage and for our crews to reach some areas. The PA Department of Transportation closed major roadways.

We called our weather forecast service on Friday, February 5, 2010 and they reported the snow would begin around noon and continue overnight, with the heaviest snowfall of 1 to 2 inches per hour ending with an accumulation of 8 to 12 inches of snow on Saturday, February 6, 2010 by 1000 hours. The forecast called for a high of 34° on Friday and a low of 25°, with Saturday's high of 26° and a low of 12°, and Sunday's high of 22° with a low of 5°. We proactively scheduled additional crews for Friday evening and Saturday in anticipation of the snow. Our Storm Team was activated on Friday evening, February 5, 2010.

The National Weather Service in Pittsburgh issued winter storm warnings for Allegheny and Beaver counties until 1800 hours on Saturday, February 6, 2010. A record daily maximum snowfall of 11.4 inches was recorded for Friday, February 5, 2010. The previous record was 4.7 inches set in 1899. A record daily maximum snowfall of 9.7 inches was recorded for Saturday, February 6, 2010, breaking the previous record of 4.3 inches set in 1911.

According to the National Weather Service in Moon Township, the 21.1 inches of snow that fell from Friday, February 5, 2010 into Saturday, February 6, 2010, was the fourth-largest snowfall in Pennsylvania history. On Saturday, February 6, 2010, Governor Edward G. Rendell declared a statewide disaster.

The National Weather Service in Moon Township reported another milestone reached in western Pennsylvania meteorological history. The additional 7.9 inch snowfall that fell on Tuesday, February 9, 2010 and Wednesday, February 10, 2010, will go down as the snowiest February in history. The total snowfall for the month as of February 10, 2010 is 29.9 inches.

130,184 customers were affected throughout the course of this snow storm from a total of approximately 580,000 customers in our service territory. At the peak of this storm, 57,000 customers experienced service interruptions.

Restoration for the last customer affected by this storm was at 1800 hours on Friday, February 12, 2010.

(b)(2) Continued

Major Event April 16, 2010

On Friday, April 16, 2010, at approximately 1530 hours, severe thunderstorms with damaging lightning, high winds, and heavy rains moved through Duquesne Light's service area in Allegheny and Beaver counties.

At 1523 hours, the NWS issued severe thunderstorm warnings for both Allegheny and Beaver counties until 1630 hours. At 1553 hours, the Allegheny County Airport in West Mifflin reported a wind gust of 66 mph. The NWS indicated that the unseasonably warm weather contributed to the intensity of these storms. The high temperature on Friday was 80 degrees.

69,820 customers were affected throughout the course of this storm from a total of approximately 580,000 customers in our service territory. At the peak of this storm, 36,000 customers experienced service interruptions.

Restoration for the last customer affected by this storm was at 1630 hours on Monday, April 19, 2010.

Major Event September 22, 2010

At approximately 1600 hours on Wednesday, September 22, 2010, severe thunderstorms with damaging lightning, rain and winds gusting to 68 mph, moved through Duquesne Light's service area in Allegheny and Beaver counties. This storm caused extensive damage to our infrastructure, including downed power lines and broken poles. A significant amount of damage, due to fallen trees, occurred in the South Hills section of Allegheny County. The National Weather Service had issued a severe thunderstorm warning for our area.

82,125 customers were affected throughout the course of this storm from a total of approximately 580,000 customers in our service territory. At the peak of this storm, 52,000 customers experienced service interruptions.

Restoration for the last customer affected by this storm was at noon on Sunday, September 26, 2010.

(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
2008	97	0.99	98	*
2009	82	0.97	85	*
2010	87	1.09	80	*
3 Year Average	89	1.02	88	*
Benchmark	126	1.17	108	NA

**** 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

2010

Total KVA Interrupted for the Period
(excluding 2/5/10, 4/16/10 & 9/22/10 Major Events previously reported) 7,640,009 KVA

Total KVA-Minutes Interrupted
(excluding 2/5/10, 4/16/10 & 9/22/10 Major Events previously reported) 611,385,895 KVA-Minutes
System Connected Load as of 12/31/10: 7,033,052 KVA

February 5, 2010 Major Event: 1,562,210 KVA (22% of System Load)
1,193,717,350 KVA-Minutes

April 16, 2010 Major Event: 837,830 KVA (12% of System Load)
291,711,930 KVA-Minutes

September 22, 2010 Major Event: 985,497 KVA (14% of System Load)
479,093,870 KVA-Minutes

(b)(3) Continued

2009

Total KVA Interrupted for the Period (excluding 2/11/09 Major Event previously reported)	6,828,430 KVA
Total KVA-Minutes Interrupted (excluding 2/11/09 Major Event previously reported)	578,862,007 KVA-Minutes
System Connected Load as of 12/31/09:	7,043,377 KVA
February 11, 2009 Major Event:	903,714 KVA (13% of System Load)
	291,170,402 KVA-Minutes

2008

Total KVA Interrupted for the Period (excluding 9/14/08 Major Event previously reported)	6,989,723 KVA
Total KVA-Minutes Interrupted (excluding 9/14/08 Major Event previously reported)	685,207,937 KVA-Minutes
System Connected Load as of 12/31/08:	7,040,058 KVA
September 14, 2008 Major Event:	2,008,290 KVA (29% of System Load)
	1,539,055,609 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, 2010 through December 31, 2010 – Three PUC Major Event Exclusions

CAUSE	NO. OF OUTAGES	OUTAGE PERCENTAGE	KVA TOTAL	KVA PERCENTAGE	KVA-MINUTE TOTAL	KVA-MINUTE PERCENTAGE
Storms	385	12%	1,056,361	14%	113,869,681	19%
Trees (Contact)	77	2%	164,355	2%	18,416,380	3%
Trees (Falling)	561	18%	1,524,455	20%	147,786,602	24%
Equipment Failures	909	29%	2,619,899	34%	200,894,975	33%
Overloads	471	15%	443,409	6%	25,529,615	4%
Vehicles	149	5%	371,238	5%	44,288,745	7%
Other	553	19%	1,460,292	19%	60,599,897	10%
TOTALS	**3,105**	**100%**	**7,640,009**	**100%**	**611,385,895**	**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 did not have any circuits on the 5% worst performing list for a year or more.

(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.**

Program – Project	Unit of Measurement	Target for 2010	Actual 2010	Percent Complete
Communication Goals				
Telecom Battery Maintenance	Batteries	92	94	102%
Overhead Distribution Goals				
Sectionalizer/Recloser Control	Control Units	82	117	143%
Sectionalizer Upper Switch	Switches	0	0	N/A
Overhead Transmission Goals				
Tower Helicopter Inspections	Number of Towers	500	1,224	245%
Tower Ground Detail Inspections	Number of Towers	300	338	113%
Substations Goals				
Breaker Maintenance	Breakers	756	776	103%
Transformer Maintenance	Transformers	65	74	114%
Station Battery Maintenance	Batteries	1,044	1,044	100%
Station Relay Maintenance	Relays	1,910	2,037	107%
Underground Distribution Goals				
Manhole Inspections	Manholes	750	764	102%
Network Vault Inspections	Network Units	550	556	101%
Network Protector Inspections	Protectors	300	533	178%
Underground Transmission Goals				
Pressurization and Cathodic Protection Plant Inspection	Work Packages	52	114	219%
Vegetation Management Goals				
Overhead Line Clearance	Circuit Overhead Miles	1,410	1,696	120%

2010 PUC Maintenance Program Year-End Variances

Sectionalizer/Recloser Control: Despite being earmarked for replacement later in the year, a substantial number of trouble-prone GWC devices were inspected shortly before storm season to ensure proper function. These aging controls were all replaced as of 1st Quarter 2011.

Tower Helicopter Inspections: Efficient use of budgeted funds allowed Duquesne Light the opportunity to inspected more transmission towers in 2010 than originally planned.

Tower Ground Inspections: Duquesne Light inspected more transmission tower ground inspections based on efficiency of our work force and the convenience of inspecting by circuits instead of towers.

Transformer Maintenance: Some additional transformer maintenance was proactively scheduled to take advantage of outages on related equipment.

Network Protector Inspections: Duquesne Light again performed additional maintenance of network protectors based upon condition through the use of modern remote supervisory systems. Transformer work in vaults also led to some opportunistic protector inspections to better utilize labor resources.

(b)(6) Continued

Pressurization and Cathodic Plant Inspections: These inspections were largely opportunistic, performed during other capital, maintenance and operating activities. This has shown to improve overall workforce utilization and efficiency.

Overhead Line Vegetation Clearance: The competitive bidding process allowed us the opportunity to expand scheduled annual maintenance to cover some upcoming circuit clearing work during 2010.

(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.**

Operating and Maintenance	2010 Budget	Actual
Total	$189,663,301	$174,509,879

Expenses were less than anticipated due to slower ramp up of Energy Efficiency Programs, implementation of cost saving programs, and lower Transmission and ancillary services expenses.

(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.**

Capital	2010 Budget	Actual
Total	$274,763,201	$258,784,897

Several projects were delayed awaiting decisions from outside agencies. Additionally, some significant material items scheduled for late 2010 delivery did not arrive until 2011.

(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).**

2011 Transmission and Distribution Goals and Objectives

Program – Project	Unit of Measurement	Target for Year 2011
Communication Goals		
Communication Battery Maintenance	Batteries	96
Overhead Distribution Goals		
Sectionalizer and Reclosers	Devices	89
Overhead Transmission Goals		
Tower Helicopter Inspections	Number of Towers	500
Tower Ground Detail Inspections	Number of Towers	300
Substations Goals		
Breaker Maintenance	Breakers	806
Transformer Maintenance	Transformers	68
Station Battery Maintenance	Batteries	1,012
Station Relay Maintenance	Relays	2,090
Underground Distribution Goals		
Manhole Inspections	Manholes	750
Network Vault Inspections	Network Units	550
Network Protector Inspections	Protectors	300
Underground Transmission Goals		
Pressurization and Cathodic Protection Plant Inspection	Work Packages	52
Vegetation Management Goals		
Overhead Line Clearance	Circuit Overhead Miles	1,410

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

Operating and Maintenance	2011 Budget
Total	$187,809,179

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

Capital	2011 Budget
Total	$251,960,148

The Duquesne Light Company 2011 Transmission and Distribution Operating and Maintenance (b)(10) and Transmission and Distribution Capital (b)(11) Budgets and Expenditures consist of the following work elements:

- Restoration of Service costs includes expenses to restore service to customers during storm-related events, and restoration from outages caused by system and component equipment failures.
- Customer Commitment costs includes expenses to satisfy residential, commercial, industrial and governmental initiated work requests.
- System Maintenance costs include expenses for programmed preventive and corrective maintenance work.
- System Improvement costs include expenses incurred to provide load relief in growth areas identified through system assessment, as well as continued targeted replacement of systems and components based on maintenance findings and trended useful life.
- Utility costs required to enhance and maintain systems and processes necessary in support of the utility operations including metering systems, technology development to satisfy hardware and system application needs, transmission and distribution planning, all revenue cycle processes and all Operations support and Administrative and General expenses.

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

No changes.

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4123931148
DUQUESNE LIGHT
411 SEVENTH AVENUE
PITTSBURGH PA 15219

0.0 LBS LTR

1 OF 1

SHIP TO:

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