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July 28, 2011

**VIA OVERNIGHT MAIL DELIVERY**

Ms. Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, Pennsylvania 17120-0200

L-00030161

**Re: Duquesne Light Company  
2011 Second Quarter Reliability Report**

Dear Secretary Chiavetta:

Enclosed for filing is the Second Quarter Reliability Report of Duquesne Light Company in accordance with the Commission's Order at L-00030161 entered March 20, 2006. Duquesne is submitting both a public version [all information except subsection (e)(10)] and a confidential version. The confidential version includes all of the information required by 52 Pa. Code §57.195, is marked "confidential and proprietary" and is enclosed in a sealed envelope.

Duquesne respectfully requests the "confidential and proprietary" version not be made available to the public.

If you have any questions regarding the information provided, please contact me.

**RECEIVED**

JUL 28 2011

PA PUBLIC UTILITY COMMISSION  
SECRETARY'S BUREAU

Sincerely,

Vern Edwards

Enclosures

c: (Public Version):

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

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**DUQUESNE LIGHT COMPANY**  
**2011 Second Quarter Reliability Report**

**Filed July 28, 2011**

**57.195 Reporting Requirements**

**(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.**

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

Gary Jack - Manager, Governmental Affairs  
(412) 393-1541, gjack@duqlight.com

**(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.**

There were no major events in the second quarter of 2011.

- (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	*
2011 2Q (Rolling 12 mo)	67	.79	85	*

\* Sufficient information to calculate MAIFI is unavailable.

#### Formulas used in calculating the indices

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

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

$$\text{CAIDI} = \text{SAIDI/SAIFI}$$

#### Data used in calculating the indices

Total KVA Interrupted for the Period  
(Excluding 1 Major Event –9/22/10): 5,562,311 KVA

Total KVA-Minutes Interrupted:  
(Excluding 1 Major Event – 9/22/10): 475,035,611 KVA-Minutes

System Connected Load as of 6/30/11: 7,079,628 KVA

September 22, 2010 Major Event: 985,497 KVA (14% of System Load)  
479,093,870 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, sectionalizers and line reclosers). Circuits that experience four or more lockouts for a device in each quarterly rolling twelve-month period are identified and reported. Customer surveys show a significant drop in satisfaction when customers experience four or more interruptions in a year, and that threshold was therefore used as a basis for this evaluation method.

The list is ranked first by the date of the most recent outage, with a secondary sort based on number of lockouts. This places a higher priority on circuits experiencing problems in the most recent quarter. Circuits that have not seen recent outages fall to a lower priority, but remain on the list for monitoring.

Circuits that appear on the list for more than a year will be targeted for remediation based on a review of outage records for root cause identification, field evaluations, and engineering analysis. Project scopes developed as a result of this analysis will be incorporated into the company's Work Plan for engineering, design and construction.

This circuit analysis method provides timely review by in-house staff. It provides a true representation of the dynamic nature of Duquesne's distribution system. The threshold of four lockouts may produce a result greater or less than 5% of the total circuits in the system. Reports will be issued on all circuits that violate the four-lockout threshold, even if the total is greater than 5% of the number of circuits on the system.

See Attachment A for table of circuit reliability values and Service Centers associated with each circuit.

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

**Second Quarter Rolling 12 Months**

Rank	Circuit	Name	Service Center	Remedial Actions Planned or Taken
1	23871	Mt. Nebo	Raccoon	Outages related to falling trees. VM issued fielded and addressed at time of failures (60% non-preventable; uproots during wet conditions). D23871 scheduled for VM maintenance in 2012. Engineering to review locations of sectionalizer/reclosers.
2	23783	Valley	Raccoon	Outages due to falling trees during storms and equipment failures. VM issues resolved at the time of the storms. Will infrared circuit by the end of the 3 <sup>rd</sup> Quarter 2011 and remediation of any problems found will be completed by the end of the 4 <sup>th</sup> Quarter 2011.
3	23670	Montour	Raccoon	Outages due to equipment failures and falling trees. D23670 to be completely worked as part of 2011 VM scheduled maintenance effort with tentative completion by end of 3 <sup>rd</sup> Quarter 2011. Circuit will be infrared by end of 3 <sup>rd</sup> Quarter 2011 to locate any other potential equipment problems. Remediation of any issues found will be completed by end of the 4 <sup>th</sup> Quarter 2011.
4	4067	Schenley	Penn Hills	Outages due to cable failures. Circuit was reviewed for cable issues in 1 <sup>st</sup> and 2 <sup>nd</sup> Quarters of 2011. The review revealed one bad splice and one leaking cable both of which were repaired at the end of May 2011. Will continue to closely monitor this circuit.
5	4499	Irwin	Preble	No new issues since January and problems found during infrared of circuit were completed on February 12, 2011.

- (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.

**July 1, 2010 through June 30, 2011 – Two PUC Major Event Exclusions**

CAUSE	NO. OF OUTAGES	OUTAGE PERCENTAGE	KVA TOTAL	KVA PERCENTAGE	KVA-MINUTE TOTAL	KVA-MINUTE PERCENTAGE
Storms	335	11%	770,997	14%	68,779,668	15%
Trees (Contact)	63	2%	127,994	2%	6,292,543	1%
Trees (Falling)	536	18%	892,220	16%	107,419,976	23%
Equipment Failures	886	30%	2,160,032	39%	173,144,590	37%
Overloads	487	17%	302,445	5%	25,815,227	5%
Vehicles	149	5%	366,163	7%	55,033,767	12%
Other	496	17%	942,460	17%	38,549,840	7%
<b>TOTALS</b>	<b>2,952</b>	<b>100%</b>	<b>5,562,311</b>	<b>100%</b>	<b>475,035,611</b>	<b>100%</b>

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

2011 Transmission and Distribution Goals and Objectives							
Program Project	Unit of Measurement	Target for 2011 2Q	Actual for 2011 2Q	Percent Complete	Targets for Year 2011	YTD Actuals Year 2011	Percent Complete
<b>Communications Goals</b>							
Communication Battery Maintenance	Batteries	24	24	100%	96	49	51%
<b>Overhead Distribution Goals</b>							
Sectionalizer and Reclosers *	Devices	24	0	0%	89	0	0%
<b>Overhead Transmission Goals</b>							
Tower Helicopter Inspections	Number of Towers	500	557	111%	500	557	111%
Tower Ground Detail Inspections	Number of Towers	125	337	270%	300	337	112%
<b>Substations Goals</b>							
Breaker Maintenance	Breakers	251	107	43%	806	452	56%
Transformer Maintenance	Transformers	55	46	84%	68	50	74%
Station Battery Maintenance	Batteries	253	254	100%	1,012	507	50%
Station Relay Maintenance	Relays	600	449	75%	2,090	713	34%
<b>Underground Distribution Goals</b>							
Manhole Inspections	Manholes	188	134	71%	750	781	104%
Network Vault Inspections	Network Units	138	109	79%	550	335	61%
Network Protector Inspections	Protectors	75	127	169%	300	379	126%
<b>Underground Transmission Goals</b>							
Pressurization and Cathodic Protection Plant Inspection	Work Packages	13	19	146%	52	37	71%
<b>Vegetation Management Goals</b>							
Overhead Line Clearance	Circuit Overhead Miles	393	398	101%	1,410	752	53%
<b>Total Units</b>		<b>2,639</b>	<b>2,561</b>	<b>97%</b>	<b>8,023</b>	<b>4,949</b>	<b>62%</b>

\* The inspection of these units has been delayed until 3<sup>rd</sup> quarter of 2011 as we are waiting for upgraded software from the vendor for the new IntelliRupter units that were installed last year so that the inspections can be performed automatically.

(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.**

Operating and Maintenance	2011 Budget	2 <sup>nd</sup> Qtr. Actual	2 <sup>nd</sup> Qtr. Budget	YTD Actual	YTD Budget
Total	\$187,809,179	\$40,851,518	\$43,102,975	\$82,540,851	\$87,627,062

(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.**

Capital	2011 Budget	2 <sup>nd</sup> Qtr. Actual	2 <sup>nd</sup> Qtr. Budget	YTD Actual	YTD Budget
Total	\$251,960,148	\$63,158,824	\$65,846,138	\$117,061,317	\$134,818,843

Capital spending in the 2<sup>nd</sup> Quarter 2011 is under budget due to construction on several projects starting later than planned.

The Duquesne Light Company's Transmission and Distribution Operating and Maintenance (e)(7) and Transmission and Distribution Capital (e)(8) Budgets and Expenditures consist of the following work elements:

- o 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.
- o Customer Commitment costs includes expenses to satisfy residential, commercial, industrial and governmental initiated work requests.
- o System Maintenance costs include expenses for programmed preventive and corrective maintenance work.
- o 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.
- o 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.



(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).

<b>Telecom</b>	Electronic Technician	7	
	Sr. Electronic Tech	12	
	Telecom Splicer/Trouble	6	
	Test Table Tech	0	
	<b>Total</b>	<b>25</b>	
<b>Substation</b>	Electrical Equipment Tech	24	
	Protection & Control Tech	27	
	Sr. Elec. Equipment Tech	10	
	<b>Total</b>	<b>61</b>	
<b>Underground</b>	Journey Apprentice	11	
	Driver Helper	0	
	UG Inspector	4	
	Journey UG Splicer	13	
	Sr. UG Splicer	3	
	UG Cable Tester/Installer	8	
	UG Mechanic	8	
	Network Operator	8	
	<b>Total</b>	<b>55</b>	
<b>Overhead</b>	Apprentice T&D	59	
	Rigger Specialist	3	
	Equipment Attendant	1	
	Equipment Material Handler	6	
	Field Inspector	5	
	Journey Lineworker	92	
	Lineworker Helper	0	
	Rigger Crew Leader	1	
	Service Crew Leader	5	
	Shop Mechanic 2 Rigger	3	
	Yard Group Leader	4	
	Sr. Lineworker	54	
	<b>Total</b>	<b>233</b>	
	<b>Street Light Changers</b>	<b>Total</b>	<b>6</b>
	<b>Mobile Worker</b>	<b>Total</b>	<b>1</b>

(e)(9) (Continued)

<b>Engineering</b>	Drafter	1
	General Clerk - Grad	10
	General Technician	0
	GIS Technician B	5
	Head File Record Clerk	1
	Survey Instrument	3
	Right of Way Agent A	4
	Sr. Technician	5
	T&D Mobile Worker	4
	Technician A	2
	Technician B	7
	Technician C	6
	Test Technician, Mobile	4
	<b>Total</b>	<b>52</b>
<b>Service Center Technician</b>	Sr. Technician	7
	Technician	11
	<b>Total</b>	<b>18</b>
<b>Traveling Operator/Troubleshooter</b>	Senior Operator	32
	Traveling Operator	9
	Traveling Operator 1/C	10
	Troubleshooter	3
	<b>Total</b>	<b>54</b>
<b>Load Dispatcher</b>	<b>Total</b>	<b>11</b>
<b>Meter Technician</b>	Meter Technician	17
	Sr. Meter Technician	18
	<b>Total</b>	<b>35</b>
<b>Meter Reader</b>	<b>Total</b>	<b>14</b>
<b>Customer Service Representatives</b>	Autodialing Operator	8
	Customer Service Rep	89
	Word Processing Clerk	2
	Sr. Customer Service	3
	<b>Total</b>	<b>102</b>
<b>Admin/Supervisory/Mgmt</b>	<b>Total</b>	<b>381</b>
<b>TOTAL</b>		<b>1,048</b>

- (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.

**Call-Out Acceptance Rate – 2<sup>nd</sup> Quarter 2011**

Month	Accepts	Refusals	Total	Percentage
April	211	310	521	41%
May	219	392	611	36%
June	210	352	562	37%

**Amount of Time it Takes to Obtain the Necessary Personnel – 2<sup>nd</sup> Quarter 2011**

Month	Total Callout Events	Necessary Personnel Accepting	Average Minutes per Calling Event		Average Minutes to Obtain Necessary Personnel	
April	76	211	16.1	1,226/76	5.8	1,226/211
May	63	219	16.1	1,014/63	4.6	1,014/219
June	76	210	6.9	528/76	2.5	528/210
<b>2<sup>nd</sup> Quarter 2011</b>	<b>215</b>	<b>640</b>	<b>12.9</b>	<b>2,768/215</b>	<b>4.3</b>	<b>2,768/640</b>
<b>YTD</b>	<b>446</b>	<b>1,184</b>	<b>18.8</b>	<b>8,376/446</b>	<b>7.1</b>	<b>8,376/1,184</b>

The numerator in the above equations equals the total number of minutes all of the callouts took during the given month/quarter/year. The denominator in the above equations equals the total number of callout events or the total number of workers accepting during the given month/quarter/year.

As an example, during the month of May, on average, it took Duquesne Light, 5.8 minutes, per worker, to obtain 211 accepts during the 76 callouts. It took Duquesne Light, on average, 16.1 total minutes to obtain the necessary personnel for each of its 76 callouts.

**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.**

Circuit	Name	Service Center	Device	Lockouts	Connected KVA	Last Outage	Total KVA-Minutes	Total KVA Interrupted	SAIDI	SAIFI	CAIDI
23871	Mt. Nebo	Raccoon	Breaker	4	17,687	6/19/11	4,484,547	47,176	254	2.67	95
23783	Valley	Raccoon	Recloser	6	45,098	6/6/11	4,196,086	28,259	93	0.63	148
23670	Montour	Raccoon	WA527	4	30,532	4/20/11	4,775,775	39,595	156	1.30	121
4067	Schenley	Penn Hills	Breaker	4	1,602	3/9/11	1,419,420	9,525	886	5.95	149
4499	Irwin	Preble	Breaker	4	3,163	1/1/11	1,992,849	12,652	630	4.00	158