

Vernon J. Edwards Regulatory Compliance Supervisor 411 Seventh Avenue, MD 16-4 Pittsburgh, PA 15219

> Telephone: 412-393-3662 Fax: 412-393-5687 vedwards@duqlight.com

October 28, 2011

VIA OVERNIGHT MAIL DELIVERY

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

OCT 28 2011

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU

Re: Duquesne Light Company 2011 Third Quarter Reliability Report

Dear Secretary Chiavetta:

Enclosed for filing is the Third 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.

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 Office of Small Business Advocate

DUQUESNE LIGHT COMPANY 2011 Third Quarter Reliability Report

Filed October 28, 2011

57.195 Reporting Requirements

(d)(2) <u>The name, title, telephone number and e-mail address of the persons who have</u> knowledge of the matters, and can respond to inquiries.

Ken Kallis - Manager, Asset Management (412) 393-8613, kkallis@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 third quarter of 2011.



OCT 28 2011

PA PUBLIC UTILITY COMMISSION SECRETARY'S BUREAU (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

	SAIDI	SAIFI	CAIDI	MAIFI
Benchmark	126	1.17	108	*
12 Month Standard	182	1.40	130	*
2011 3Q (Rolling 12 mo)	99	.94	105	*

* Sufficient information to calculate MAIFI is unavailable.

Formulas used in calculating the indices

SAIFI =	(Total KVA interrupted) - (KVA impact of major events) System Connected KVA
SAIDI =	(Total KVA-minutes interrupted) - (KVA-minute impact of major events)
	System Connected KVA

CAIDI = SAIDI/SAIFI

Data used in calculating the indices

Total KVA Interrupted for the Period (No Major Events Excluded):	6,629,661 KVA
Total KVA-Minutes Interrupted: (No Major Events Excluded):	699,688,608 KVA-Minutes
System Connected Load as of 9/30/11:	7,076,372 KVA

(e)(3) Rolling 12-month reliability index values (SAIFI, CAIDI, SAIDI, and if available, MAIFI) and other pertinent information such as customers served, number of interruptions, customer minutes interrupted, number of lockouts, and so forth, for the worst performing 5% of the circuits in the system. An explanation of how the electric distribution company defines its worst performing circuits shall be included.

Circuits are evaluated based on a rolling twelve-month count of lockouts of protective devices (circuit breakers, 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) <u>Specific remedial efforts taken and planned for the worst performing 5% of the circuits as identified in paragraph (3)</u>

<u> </u>		, it is a set of the s	Service	
Rank	Circuit	Name	Center	Remedial Actions Planned or Taken
1	23890	Carrick) McKeesport	Outages due to equipment failures, jumper failures, and falling trees. VM completed maintenance on this circuit in 1 st Quarter of 2011 but will monitor it for any further tree issues. Infrared inspection of this circuit will be conducted and completed by end of 2011 with repair items to be completed by end of 1 st Quarter 2012.
2	23650	Nevilte	Preble	All outages due to falling trees. No further action from VM at this time. Circuit will be monitored for any further issues.
3	23741	Oakland	Penn Hills	Outages due to equipment failures (cable and aerial cable failures) and a storm. Underground to review cable coming out of substation to identify potential cable problems and repair any abnormalities found by end of 1 st Quarter 2012.
4	23783	Valley	Raccoon	Outages due to falling trees during storms and equipment failures. Tree issues were resolved at the time of the storms. Circuit outages will continue to be monitored to ensure that outages are extreme weather related and not due to maintenance needs. Duquesne will monitor closely and adjust VM maintenance if necessary. Infrared inspections have been performed on this circuit. Items found during IR inspections are expected to be completed by the end of the 1 st Quarter 2012.
5	23935	Eastwood	Penn Hills	All outages due to storms in July. However, circuit will be reviewed by Asset Management for overloads.
6	23837	California	Edison	Majority of outages due to falling trees and storms. VM circuit maintenance on entire circuit was completed in 2 nd Quarter of 2011. VM will review for further issues by end of 2011.
7	23635	Ambridge	Raccoon	This circuit is scheduled to be relieved of load when the Edgeworth Project is completed, which will improve the reliability of this circuit. All outages due to storms or falling trees. VM worked with PennDot in 2011 on daylighting this road which was completed in 3 rd Quarter. However, VM will review these areas for any additional remediation that is necessary by end 2011.
8	23862	Wilson	McKeesport	Majority of outages due to equipment failures and overloads. Infrared of circuit will be conducted and completed by end of 2011 and repairs to be complete by end of 1 st Quarter 2012. Asset Management to review for overloads by end of 1 st Quarter 2012.
9	4067	Schenley	Penn Hills	Outages due to cable failures. Circuit was reviewed for cable issues in 1 st and 2 nd Quarters of 2011. The review revealed one bad splice and one leaking cable both of which were repaired at the end of May 2011. Additional outage since the 2 nd Quarter was due to a storm with no known cause. Will continue to monitor for any further cable failures.
10	23871	Mt. Nebo	Raccoon	Outages due to falling trees. VM issues fielded and addressed at time of failures (60% non-preventable; uproots during wet conditions). D23871 proposed for VM maintenance in 2012. Planning issued a recommendation to Engineering to install a sectionalizer on this circuit to help improve reliability. This work should be completed by end of 1 st Quarter 2012.
11	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 4 th Quarter. Circuit was infrared in 2 nd Quarter and items found will be completed by the end of the 1 st Quarter 2012. No new outages since 2 nd Quarter.

Third Quarter Rolling 12 Months

(e)(5) A rolling 12-month breakdown and analysis of outage causes during the preceding guarter, 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.

CAUSE	NO. OF OUTAGES	OUTAGE PERCENTAGE	KVA TOTAL	KVA PERCENTAGE	KVA- MINUTE TOTAL	KVA-MINUTE PERCENTAGE
Storms	683	21%	1,435,608	22%	211,113,381	30%
Trees (Contact)	62	2%	72,197	1%	6,416,510	1%
Trees (Falling)	617	19%	1,106,071	17%	156,698,652	22%
Equipment Failures	973	29%	2,414,048	36%	203,853,402	29%
Overloads	377	11%	347,662	5%	28,004,212	4%
Vehicles	149	4%	371,495	6%	53,845,787	8%
Other	473	14%	882,580	13%	39,756,664	6%
TOTALS	3,334	100%	6,629,661	100%	699,688,608	100%

October 1, 2010 through September 30, 2011 – No PUC Major Event Exclusions

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

Program	lls and Objectives	Target for	Actual for	Percent	Targets for	YTD Actuals	Percen
Project	Measurement	2011 3Q	2011 3Q	Complete	Year 2011	Year 2011	Complete
Communications Goals							
Communication Battery Maintenance	Batteries	24	24	100%	96	73	76%
Overhead Distribution Goals							
Sectionalizer and Reclosers	Devices	30	121	403%	89	121	136%
Overhead Transmission Goals							
Tower Helicopter Inspections	Number of Towers	0	0	N/A	500	557	1119
Tower Ground Detail Inspections	Number of Towers	125	0	0%	300	337	1129
Substations Goals							
Breaker Maintenance	Breakers	225	186	83%	806	638	79%
Transformer Maintenance	Transformers	6	5	83%	68	55	819
Station Battery Maintenance	Batteries	253	250	99%	1,012	757	75%
Station Relay Maintenance	Relays	600	570	95%	2,090	1,283	619
Underground Distribution Goals							
Manhole Inspections	Manholes	75	22	29%	750	803	107%
Network Vault Inspections	Network Units	55	148	269%	550	483	88%
Network Protector Inspections	Protectors		30	100%	300	409	136%
Underground Transmission Goals							
Pressurization and Cathodic							
Protection Plant Inspection	Work Packages	13	13	100%	52	50	96%
Vegetation Management Goals							
Overhead Line Clearance	Circuit Overhead Miles	393	401	102%	1,410	1,153	82%
	Total Units	1,829	1,770	97%	8,023	6,719	849

(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	3 rd Qtr.	3 rd Qtr.	YTD	YTD
	Budget	Actual	Budget	Actual	Budget
Total	\$187,809,179	\$48,019,931	\$49,150,829	\$130,560,782	\$136,777,891

(e)(8) <u>Quarterly and year-to-date information on budgeted versus actual transmission</u> <u>and distribution capital expenditures in total and detailed by the EDC's own</u> <u>functional account code or FERC account code as available.</u>

Capital	2011	3 rd Qtr.	3 rd Qtr.	YTD	YTD
	Budget	Actual	Budget	Actuai	Budget
Total	\$251,960,148	\$67,110,246	\$62,021,518	\$184;171,563	\$196;840,361

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:

- 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.

(e)(9) <u>Dedicated staffing levels for transmission and distribution operation and</u> <u>maintenance at the end of the quarter, in total and by specific category (e.g.</u> <u>linemen, technician, and electrician).</u>

7	Electronic Technician	Telecom
12	Sr. Electronic Tech	recom
6	Telecom Splicer/Trouble	
0	Test Table Tech	
25	Total	
24	Electrical Equipment Tech	Substation
27	Protection & Control Tech	
10	Sr. Elec. Equipment Tech	
61	Total	
10	Journey Apprentice	Underground
0	Driver Helper	-
4	UG Inspector	
14	Journey UG Splicer	
3	Sr. UG Splicer	
11	UG Cable Tester/Installer	
7	UG Mechanic	
9	Network Operator	
58	Total	
58	. Apprentice T&D	Overhead
3	Rigger Specialist	
1	Equipment Attendant	
6	Equipment Material Handler	
5	Field Inspector	
90	Journey Lineworker	
0	Lineworker Helper	
1	Rigger Crew Leader	
5	Service Crew Leader	
3	Shop Mechanic 2 Rigger	
4	Yard Group Leader	
	Callanuation	
55	Sr. Lineworker	
_	Sr. Lineworker	
55		Street Light Changers

(e)(9) (<u>Continued)</u>

·

1	Drafter	Engineering
10	General Clerk - Grad	
0	General Technician	
5	GIS Technician B	
1	Head File Record Clerk	
3	Survey Instrument	
4	Right of Way Agent A	
7	Sr. Technician	
4	T&D Mobile Worker	
2 7	Technician A	
	Technician B	
6	Technician C	
4	Test Technician, Mobile	
54	Total	
7	Sr. Technician	Service Center Technician
8	Technician	
15	Total	· · · · · · · · · · · · · · · · ·
30	Senior Operator	Traveling Operator/Troubleshooter
7	Traveling Operator	
10	Traveling Operator 1/C	
5	Troubleshooter	
52	Total	
10	Total	Load Dispatcher
18	Meter Technician	Meter Technician
18	Sr. Meter Technician	
36	Total	·
13	Total	Meter Reader
11	Autodialing Operator	Customer Service Representatives
99	Customer Service Rep	
3	Word Processing Clerk	
3	Sr. Customer Service	
0	Telephone Switchboard	
116	Total	
379	Total	Admin/Supervisory/Mgmt
1,058	TOTAL	

.

(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 – 3 rd Quarter 2011							
Month	Accepts	Refusals	Total	Percentage			
July	395	797	1,192	33%			
August	238	504	742	32%			
September	163	454	617	26%			

- and -----

Amount of Time it Takes to Obtain the Necessary Personnel – 3rd Quarter 2011

Month	Total Callout Events	Necessary Personnel Accepting	Average Minutes per Calling Event		Personnel		
July	113	395	17.8	2,015/113	5.1	2,015/395	
August	81	238	28.9	2,339/81	9.8	2,339/238	
September	67	163	12.4	830/67	5.1	830/163	
3 rd Quarter 2011	261	796	19.9	5,184/261	6.5	5,184/796	
YTD	707	1,980	19.2	13,560/707	6.8	13,560/1,980	

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 July, on average, it took Duquesne Light, 5.1 minutes, per worker, to obtain 395 accepts during the 113 callouts. It took Duquesne Light, on average, 17.8 total minutes to obtain the necessary personnel for each of its 113 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
23890	Carrick	McKeesport	EA778	6	24,616	9/7/11	5,061,153	284,487	206	11.56	18
23650	Neville	Preble	EA261	4	27,349	8/27/11	4,668,651	57,834	171	2.11	81
23741	Oakland	Penn Hills	Breaker	4	28,078	8/19/11	5,555,322	64,811	198	2.31	86
23783	Valley	Raccoon	Recloser	4	45,098	8/15/11	5,638,432	46,718	125	1.04	121
23935	Eastwood	Penn Hills	Recloser	4	21,497	7/29/11	1,177,307	24,657	5 5	1.15	48
23837	California	Edison	WA300	4	17,530	7/28/11	3,189,458	71,551	182	4.08	45
23635	Ambridge	Raccoon	Breaker	4	18,308	7/18/11	14,886,031	66,111	813	3.61	225
23862	Wilson	McKeesport	EA663	4	33,843	7/18/11	8,016,178	81,500	237	2.41	98
4067	Schenley	Penn Hills	Breaker	4	1,602	7/8/11	2,334,020	11,870	1,457	7.41	197
23871	Mt. Nebo	Raccoon	Breaker	4	17,687	6/19/11	5,476,107	54,381	310	3.07	101
23670	Montour	Raccoon	WA527	4	30,532	4/20/11	4,708,396	38,451	154	1.26	122

