



Connecticut Department of

**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

Public Hearing – September 26, 2011  
Joint Committee on Hurricane Irene

Testimony Submitted by Kevin DeIGobbo, Chair, the Public Utilities Control Authority (PURA)  
Department of Energy and Environment Protection

**REVIEW OF THE PERFORMANCE OF CONNECTICUT'S PUBLIC UTILITIES IN PREPARING  
FOR AND RESPONDING TO TROPICAL STORM IRENE**

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Thank you for the opportunity to present testimony regarding the scope of review of the performance of Connecticut's public utilities in preparing for and responding to Tropical Storm Irene by the Public Utilities Control Authority (PURA or the Authority).

**Post Storm Regulatory Review**

The Public Utilities Control Authority (PURA) is undertaking its review of the performance of Connecticut's public utilities in preparing for and responding to Tropical Storm Irene. Docket No. 11-09-09. (PURA is the successor agency of the former Department of Public Utility Control. PURA was established pursuant to Public Act 11-80 that became effective on July 1, 2011.)

This is standard regulatory practice following major storm events and derives from the Authority's statutory cognizance pursuant to CGS §16-11 to ensure that the state's public utilities meet their obligations to provide safe and adequate service for ratepayers.

PURA's review following major storm events includes but is not limited to the following:

- Emergency planning
- Preparation for the specific storm
- Restoration of service
- Plans for mutual assistance and supplemental staff
- Communications with customers and public officials
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Connecticut's electric distribution companies and wire line telephone companies are under pre-existing orders to file post-storm reports on these issues to the authority.

**Historical Overview of Post Storm Regulatory Reviews**

Following Hurricane Carl in 1986, the Authority initiated a proceeding to investigate utility performance in preparing for the storm and managing outage restoration following the storm. See Docket No. 86-11-18, DPUC Review of Performance of UI, CL&P and SNETCO in Restoring Service After Storm Carl. In the Decision in that proceeding, the Authority ordered the electric utilities to report on their performance after every storm that results in a major electric outage event.

The Authority initiated a broad investigation of electric distribution company reliability in 1986, following an initial investigation into Hurricane Gloria in 1985 and Hurricane Carl in 1986. In that proceeding, Docket No. 86-12-03, Long Range Investigation to Examine the Adequacy of the Transmission and Distribution Systems of The Connecticut Light and Power Company and The United Illuminating Company, the Authority issued a voluminous Decision that required many changes in the way the electric utilities maintain their electric systems and report on such programs to the Authority. The major requirements of that Decision (27 Orders in all) are:

- Each electric distribution company must submit an annual report on the reliability of its electric system to the Authority, including data broken down to an individual circuit basis (useful fact: CL&P's system is comprised of about 1200 circuits);
- Each electric distribution company must identify those parts of its system that exhibit the worst performance, and submit improvement plans to the Authority;
- CL&P was required to re-prioritize areas of its system that should receive more tree trimming, based on history and customer density;
- CL&P was required to conduct a number of studies on electric construction types (for example, tree wire);
- UI was required to conduct a number of studies on its system that related to issues unique to it.

The above noted annual reporting requirements are still in effect today, and both UI and CL&P provide reports to the Authority that include highly detailed information on how the companies manage reliability related issues. The Authority does not merely file these reports; rather, they serve as the basis for frequent communication between the Authority and the electric utilities, as the Authority works continuously to improve electric reliability for customers in the State.

In 1999, the Authority initiated a broad investigation of electric utility performance during a summer heat wave that resulted in numerous outages to customers throughout the state. See Docket No. 99-08-01, DPUC Investigation into Electric Capacity and Distribution. The investigation determined that the primary reason for the outages was transformer overloading due to inadequate sizing (rating). This investigation resulted in a number of findings and recommendations for future improvements in performance; primarily, that the EDCs implement improved methodology for forecasting loading on equipment.

The Authority also proactively examines electric system reliability and takes action, where necessary, to ensure that electric reliability is maximized in anticipation of future supply difficulties. For example, in its Docket No. 02-04-12, DPUC Investigation into Possible Shortages of Electricity in Southwest Connecticut during Summer Periods of Peak Demand, the Authority examined the susceptibility of the electric system in Southwestern Connecticut to supply deficiencies during peak periods, and made certain recommendation for improvements in operations in the course of that review. The Authority determined that the ultimate solution for SWCT's reliability problem was a reinforced transmission system, but that distributed generation could serve as an interim solution and recommended that the Legislature consider incentives for such generation.

Pursuant to the provisions of Public Act 07-242, the Authority in Docket No. 07-06-63 provided a report to the General Assembly on Electric Distribution Company Staffing Levels, Public Notification Processes, and Service Restoration Response Time Relating to Electric Service Outages.

General Statutes of Connecticut (Conn. Gen. Stat.) §16-245y(a) requires each electric distribution company to report reliability data to the Authority for the prior 12 months in terms of System Average Interruption Duration Index and System Average Interruption Frequency Index by October 1 of each year. The Authority is then required to report the data for each electric and electric distribution company and for the State as a whole to the joint standing committee of the General Assembly having cognizance of matters relating to energy, by the following January 1. The latest report covered calendar year 2010. The Authority found that reliability in the State has not declined since Public Act 98-28, An Act Concerning Electric Restructuring, was enacted. CL&P's overall reliability has improved since 1998. UI's reliability has declined slightly according to measures of reliability; however, it is still excellent compared to many other utilities. On a state-wide basis, reliability has improved since 1998.

More recently the Authority initiated an investigation into a major "Nor'easter" in March 2010 that caused widespread, persistent outages primarily in the southwestern portion of the State. See Docket No. 10-03-08, Investigation of the Service Response and Communications of The Connecticut Light and Power Company (CL&P) and The United Illuminating Company (UI) following the Outages from the Severe Weather over the Period of March 12 through March 14, 2010. After an exhaustive investigation, the Authority found numerous areas for improvement in electric utility outage restoration practices and communications, and ordered such improvements. The recommended actions included implementation of improved communications, additional training for certain emergency response personnel, enhanced after-action reviews, and additional electronics capabilities in line trucks. (The recommendations of the Jacobs Consultancy Report are attached in the Appendix to this testimony.)

#### **Rate Treatment and Impacts of Storm Related Expenses**

In their last rate proceeding, Docket No. 09-12-05, CL&P was allowed \$9.6 Million in rates for purposes of storm expenses. For events greater than \$5 Million they are allowed to access a Storm Reserve Accrual account. This account allows \$3 Million in rates that are added each year. The current balance in the account will be determined as part of PURA's review.

In addition, CL&P maintains insurance for storm related expenses through a NU System Transmission and Distribution Line policy. It provides a \$15 Million limit per occurrence and annual aggregate, with a \$10 Million deductible.

UI's last rate proceeding was Docket No. 08-07-04. Their accounting for storm expenses differs from CL&P's in that regular storm damage expenses are charged across various O&M accounts. For expenses that exceed \$600 thousand, UI would have historically been able to access a Storm Reserve Accrual account much like CL&P. However, in their last rate case, UI President James Torgerson revised to \$0, UI's initial request to accrue \$600 thousand per year in a Storm Reserve Accrual account. The record indicates it was one of the attempts to reduce rate impacts of that case. Instead, expenses greater than \$600 thousand in rate years 2009 and 2010 are considered a regulatory asset that are adjudicated in the next rate proceeding. However it appears that no such automatic treatment as a regulatory asset is provided for in 2011. The Authority would have to make a determination whether to allow such expenses to be treated as a regulatory asset if UI were to make a request.

UI does not maintain the same explicit storm related expense insurance policy that CL&P carries. Preliminary data indicates that it would not meet a cost/benefit test of value to ratepayers for UI to have secured such coverage. However, the policies that it does have in place may provide some mitigation of

storm related expenses. The specific terms and potential claims against those policies will be scrutinized in the course of the Authority's review.

A public service company is legally permitted to file for an amendment to its rates at any time. This right is stated in Conn. Gen. Stat. §16-19. In addition, a public service company has the right to file for an interim rate increase pursuant to Conn. Gen. Stat. §16-19(d), if the Authority finds that such an interim rate increase is necessary to prevent substantial and material deterioration of the public service company's financial condition or to prevent substantial deterioration of the adequacy and reliability of service.

It is the practice of the Authority in utility rate cases to establish rates prospectively. The basis of the rates are a historical test year, adjusted for pro forma purposes – that is, adjusted for known and reasonably predicted assumptions regarding both the test year and the forward looking period for which the rates will be in effect. The test year is critical as it is used for comparison purposes to determine the reasonableness of the forecasted rate year. Generally, the Authority uses the operating results for the twelve month period that ends as close to the time of the rate application as practicable for the test year.

The regulatory goal is to allow expenses and revenues during the period rates are in effect to, on balance, allow the company a reasonable opportunity to achieve its allowed rate of return. However, the rates are not designed to guarantee the company a return on whatever amount it spends, nor does it cover expenses incurred between rate cases. To the extent operating expenses, incurred in a prudent and efficient manner, are less than projected – the company is allowed to keep rates as allowed and increase its return. If the return is higher than allowed, the Authority cannot “take back” the increased earnings, as it would be an exercise in retroactive ratemaking and constitute an improper “taking” of property by government. However, the Authority can re-adjust rates once again prospectively to more accurately reflect the operating environment.

Similarly, between rate cases, a utility company cannot incur expenses above those allowed with the expectation that it can collect revenues for it in the future. The utilities remedy for such an occurrence is to file for an interim rate increase or for a full rate that reflect expected increased costs. In the instance where the higher costs are to be constant, such as costs related to distributed generation, contractual capacity costs for an operating power plant, or transmission lines being constructed – the company will file for an amendment to rates that will reflect the increased costs. Where expenses are incurred that are of an extra-ordinary on non-repeating nature – there are other regulatory options that meet the public interest – such as allowing the company to pay and incur those unanticipated and extraordinary expenses and to seek recovery at the time of its next rate case. Typically, those expenses may be allowed but amortized over a period of time to mitigate rate impacts.

#### **Tree Trimming/Capital Expenditures**

CL&P was allowed \$21.5 Million for tree trimming expenses in its 2010 rate case proceeding. In that case the Authority actually authorized an amount that was 6.7% greater than CL&P had requested in an attempt to further reduce the tree trimming cycle below 5 years. Historically, the authorized expenses have increased from \$14.2 Million prior to CL&P's 2007 rate case, to \$19.6 Million to the currently authorized amount.

The Authority also approved CL&P's proposed capital expenditure program of \$310 million, \$331 million and \$314 million for 2010, 2011 and 2012 respectively, to be at a reasonable and appropriate level to avoid decline in reliability.

UI was authorized \$3.1 Million in 2009 and \$3.2 Million in 2010 for tree trimming as a result of its 2009 rate case. This represented an increase from \$2.88 Million in 2008.

UI currently utilizes a different metric for their tree trimming program. Their performance based program schedules trimming every 4 years for 3 phase sections of line and every 8 years for single phase sections. However, that schedule is reduced for any section of single phase line that experiences two or more tree contact outages in a 36 month period.

The Authority approved capital expenditures of \$142 million and \$178 million for 2009 and 2010 respectively. It should be noted that the approved amount for this category in 2004 was \$53 million.

**Lineworkers/Troubleshooters**

Subject to audit and verification during the Authority's review, current data indicates the following:

In 2001, CL&P had 385 employees assigned to this category and 422 in 2011.

In 2000, UI had 77 employees assigned to this category and 99 in 2011.

Thank you for the opportunity to present testimony on this proposal. If you should require any additional information, please contact the Department Energy & Environmental Protection's legislative liaison, Robert LaFrance, at 860.424.3401.

## Appendix

The recommendations of the Jacobs Consultancy Report (From Section 9 of the report; see the following links.)

CL&P ([http://www.ct.gov/dpuc/lib/dpuc/storm/clp\\_final\\_report.pdf](http://www.ct.gov/dpuc/lib/dpuc/storm/clp_final_report.pdf))

### List of Recommendations

Section	No.	Recommendation
Emergency Planning	8.1.3.1	Formally expand the after action/lessons-learned reviews to include direct input from field workers and first and second levels of field supervision, Field Supervisor Lines (FSL) and Supervisor of Distribution Lines (SDL). Refer to Conclusion 8.1.2.3.
Preparedness	8.2.3.1	Continue to develop enhanced communications capabilities with cities and municipalities. Refer to Conclusions 8.2.3.5, 8.2.3.6 and 8.2.3.7.
	8.2.3.2	Consider accelerating programs intended to provide mobile data terminals in distribution line trucks. Refer to Conclusion 8.3.2.8.
	8.2.3.3	Until mobile data terminals are in most line trucks, provide more Field Supervisor Lines (FSLs) and Supervisor of Distribution Lines (SDLs) with laptop or equivalent computers equipped with air cards to streamline the process of closing work order tickets and enhance the ability of the dispatcher and analysts to effectively and efficiently plan and direct the remaining work efforts. Refer to Conclusion 8.3.2.8.
Restoration Performance	8.3.3.1	Provide additional training for staff assigned to Patrol or Damage Assessment duties during emergency responses to enhance their understanding of the configuration and operation of the system. This training should be conducted at least annually; and preferably semiannually and should include physical walk downs of the transmission and distribution systems, led by experienced field workers. Refer to Conclusion 8.3.2.7.
	8.3.3.2	Provide additional emergency response and corporate policy training for those involved in line crew management during emergencies. This should include Area Managers, Field Supervisor Lines (FSLs) and Supervisor of Distribution Lines (SDLs), especially those who are not involved in line activities on a daily basis. Refer to Conclusion 8.3.2.7.
Post-Storm Activities	8.5.3.1	Formally expand the after action/lessons-learned reviews to include direct input from field workers and first and second levels of field supervision, Field Supervisor Lines (FSL) and Supervisor of Distribution Lines (SDL). Refer to Conclusion 8.5.2.3.

**List of Recommendations**

Emergency Planning	8.1.3.1	Develop the Emergency Response Plan (ERP) as a living document with the ability to accommodate regular updates and modifications stemming from changed practices and lessons-learned. Refer to Conclusion 8.1.2.3.
Preparedness	8.2.3.1	Continue to develop enhanced communications capabilities with cities and municipalities. Refer to Conclusions 8.2.2.5, 8.2.2.6, and 8.2.2.7.
	8.2.3.2	Within the existing project to install MDTs in all trucks by 2012, ensure that distribution supervisor and distribution line trucks are a high priority. In connection with outage restoration work MDTs streamline the process of closing work order tickets and enhance the ability of the dispatcher and analysts to effectively and efficiently plan and direct the remaining work efforts
Restoration Performance	8.3.3.1	Provide additional training for staff assigned to Patrol or Damage Assessment duties during emergency responses to enhance their understanding of the configuration and operation of the system. This training should be conducted at least annually and preferably semiannually and should include physical walk-downs of the transmission and distribution systems led by experienced field workers.
	8.3.3.2	In order to promote a safe work environment, investigate and record for each type of boom truck vehicle the manufactures recommendation as to what wind velocity the boom is constructed to withstand. This information should be provided to field workers and their supervisors through formal safety rules and training. Refer to Conclusion 8.3.2.4.

