STATE OF CONNECTICUT
PUBLIC UTILITIES REGULATORY AUTHORITY

PURA INVESTIGATION OF	:	DOCKET NO. 11-09-09
PUBLIC SERVICE COMPANIES	:	
RESPONSE TO 2011 STORMS	:	June 11, 2012

BRIEF OF GEORGE JEPSEN, ATTORNEY
GENERAL FOR THE STATE OF CONNECTICUT

George Jepsen, Attorney General for the State of Connecticut ("Attorney General"), hereby submits his brief in the above-captioned proceeding.

I. EXECUTIVE SUMMARY

Connecticut suffered two of the largest storm-related power outages that have ever hit the state in 2011. On August 28, 2011, Tropical Storm Irene ("Irene") caused roughly 700,000 customers in Connecticut to lose power and on October 29, 2011, a Nor'easter caused power outages to more than 800,000 in the State. Service restoration took nine days after Irene and eleven days after the Nor'easter.

These storms revealed major deficiencies in the emergency preparedness and response of many of the State's public service companies, but none more-so than the Connecticut Light and Power Company ("CL&P"). The evidence presented in this case reveals that CL&P was imprudent with regard to its:

-unreasonably inadequate preparation for major storms, including its failure to exercise or drill its emergency response plans and evaluate the results for at least five years prior to the 2011 storms;

-unreasonable failure to request the assistance of outside crews in a timely manner and reasonably manage the crews that eventually arrived in Connecticut;

-unreasonable damage assessment process, including its inability to transmit assessment information from the field to operations headquarters efficiently;

-unreasonable failure to train and support municipal liaisons and defer to local restoration priorities;

-unreasonable development of estimated restoration times; and

-unreasonable mismanagement of communications with the public and public officials concerning estimated restoration times.

The Public Utilities Regulatory Authority ("PURA" or "Authority") should find in this case that certain of CL&P's storm-related actions and inactions were imprudent. As a threshold matter, PURA should specifically hold in this case that it will disallow the recovery by CL&P of any storm-related costs that are the result of the company's imprudent conduct, consistent with its Final Decision in Docket No. 08-02-06, DPUC Investigation into the Connecticut Light and Power Company's Billing Issues ("Docket No. 08-06-02"). For example, CL&P's unreasonable level of unpreparedness for major storms and its failure to respond to the 2011 storms in a reasonable and prudent manner likely caused the service restoration process to take longer than it otherwise would have. To the extent that this delay caused the company to incur costs, PURA should prohibit the recovery of those costs from ratepayers. PURA should defer the specific quantification of this amount until CL&P's next general ratemaking proceeding.

In addition, PURA should also make all of the necessary predicate findings to impose meaningful imprudence penalties and disallowances in future ratemaking proceedings. Specifically, PURA should disallow the recovery from ratepayers of a substantial portion, in the range of thirty to fifty percent, of CL&P's 2011 storm restoration and recovery costs. This penalty fairly reflects the cumulative effects of CL&P's imprudence in its preparations for and management of these storms. CL&P's imprudence, especially with respect to the Nor'easter, turned extended power outages into crisis situations, caused significant public anxiety and severely impacted residents' and towns' abilities to effectively deal with the outages. PURA

should defer the specific quantification of this amount until CL&P's next general ratemaking proceeding.

In the alternative to a complete disallowance of a percentage of recovery costs, PURA should reduce CL&P's return on equity ("ROE") in a future ratemaking proceeding for the company's imprudent management, both as a penalty and as a strong warning to improve its management practices. Given the magnitude of the company's mismanagement of its storm preparation and response, the ROE penalty must be large enough to be meaningful and sufficient to reflect the full extent of CL&P's failures in the 2011 storms.

In addition, PURA should make specific findings and issue orders concerning the inadequacies of the United Illuminating Company's ("UI") major storm preparedness and response. PURA should also endorse the concept of creating a third-party pole administrator and require that the appointment of that administrator, as well as the duties and responsibilities of that third-party pole administrator, be clarified in a separate proceeding.

II. INTRODUCTION

Two major weather events struck Connecticut in 2011, Irene and the Nor'easter. Both storms caused sustained outages of utility service to hundreds of thousands of Connecticut residents. Irene caused more than 700,000 customers to lose power, some for as long as nine days. The Nor'easter interrupted electric service to more than 800,000 Connecticut residents, many for as long as eleven days.

This case represents the PURA's investigation of the Connecticut public service companies' readiness for and response to these two major storms. Irene and the Nor'easter revealed significant shortcomings in major storm preparedness and response in Connecticut. Moreover, a number of these shortcomings were not new. As noted in the Report of the Two

Storm Panel ("Two Storm Report"),[1] "[t]he repetition of essentially the same problems identified after each storm over a 25 year period and similar recommendations is striking." Two Storm Report, 10. These recurring problems include poor communications with municipalities and inadequate supervision of expanded workforce crews. Id. PURA should use the present proceeding to finally begin to reverse this disturbing pattern and ensure that Connecticut's utility companies are adequately prepared for the next major storms.

The scope of this proceeding includes the responses of all of the state's regulated public service companies to Irene and the Nor'easter. This brief focuses primarily on the imprudence of CL&P's preparedness for and response to the Nor'easter both to point out CL&P's glaring deficiencies and shortcomings and to highlight examples of issues and concerns that PURA should address with all of the states' public service companies.[2] This brief does not, by design, address certain specific issues that PURA must consider in future proceedings as required by Public Act 12-148, An Act Enhancing Emergency Preparedness and Response ("P.A. 12-148"), including standards for acceptable utility performance following emergencies and specific changes to the state's tree trimming specifications and requirements.

For the reasons fully explained herein, the Attorney General respectfully submits that the Authority find in this proceeding find that certain aspects of CL&P's preparation for and response to the 2011 storms were imprudent as discussed herein. PURA should also make all findings necessary and appropriate to disallow recovery of costs that are related to, or result from, CL&P's imprudence, and impose other appropriate penalties.

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[1] PURA took administrative notice of the Two Storm Report on January 9, 2011.

[2] The failure to address the conduct of any other public service company in this brief is not, and should not be interpreted as, an endorsement or approval of any other company's conduct by the Attorney General.

III. BACKGROUND

A. Tropical Storm Irene

Irene formed as a tropical storm on August 20, 2011and became a hurricane two days later while passing over Puerto Rico. Davies Report, 12. On Tuesday, August 23, 2011, weather forecasts calculated that Irene would affect Connecticut within five days. AG-95. At 10:00 a.m. on Sunday, August 28, 2011, Irene, which had by then been downgraded back to a tropical storm, hit Stamford, Connecticut with sustained winds of 35-40 miles per hour and gusts to 66 miles per hour. It remained in Connecticut for fourteen hours. EL-01, 3.

Irene caused outages to over seven million customers on the east coast. EL-1. In Connecticut, it caused electrical service outages to 730,260 customers, including 671,789 customers at its peak which occurred at 9:00 p.m. on August 28, 2011. Witt Ex. 51. AG-95. Irene caused roughly 200,000 United Illuminating Company ("UI") customer to lose power, about 158,000 at peak. Witt, 28. The bulk of the remainder of the outages were sustained by CL&P customers. Eastern Connecticut was the hardest hit part of the state. EL-5.

B. Nor'easter

CL&P and UI began monitoring the storm that became the Nor'easter on Thursday, October 27, 2011. EL-13; Transcript ("Tr."), 1961. At that time, CL&P's weather forecasts indicated the possibility of a rain and snow mix. See Goodfellow/Townsley PFT, Ex. TCG 3-2. UI's forecasts for its service territory in Southwest Connecticut on that Thursday indicated mostly a rain event. Tr. 1961. By the morning of Friday October 28, 2011, "weather forecasts indicated heavy wet snow and strong winds for the state of Connecticut." AG-96. Specifically, the 6:00 a.m. forecast indicated that northwest Connecticut and northern Connecticut could receive four to eight inches of snow, with two to four inches falling in other parts of the State.

Goodfellow/Townsley PFT, Ex. TCG 3-2. By 1:00 p.m. on Friday, October 28, forecasts called for four to eight inches of snow in northern Connecticut and eight to twelve inches in Connecticut's northwest hills. EL-13. AG-96. Around that time, UI's forecasts for its service territory began to indicate a chance of snow. Tr. 1961.

By 8:00 a.m. on Saturday, October 29, CL&P's forecasts again showed snowfalls of eight to twelve inches in northwest Connecticut. Goodfellow/Townsley PFT, Ex. TCG 3-2. By 3:45 p.m. on Saturday, October, 29, these projections increased to eight to thirteen inches of snowfall in some parts of Connecticut and three to ten inches elsewhere in the State. Goodfellow/Townsley PFT, Ex. TCG 3-2. Similarly, on Saturday UI's forecasts indicated one to three inches of snow beginning that afternoon.

The Nor'easter hit Connecticut around mid-day Saturday, October 29 and continued through October 30, 2011. EL-13. AG-96. By 10:00 a.m. on Sunday October 30, the storm had left eight to sixteen inches of heavy wet snow throughout most of CL&P's service territory and three to five inches in UI's service territory. Because trees still had their foliage at that time, this snowfall resulted in major tree damage throughout the State and widespread electricity outages in transmission and distribution lines. AG-96.

In Connecticut, the Nor'easter caused outages to 809,097 of CL&P's 1.2 million customers (roughly 67 percent), 807,228 at its peak, for as many as eleven days. Connecticut October 2011 Snowstorm Power Restoration Report by Witt Associates ("Witt Report"),[3] 28; Witt Ex. 51. AG-96. The Nor'easter also caused outages to 52,000 of UI's 350,000 customers (roughly 15 percent), 19,000 at its peak. Witt, 28. Overall, the Nor'easter caused outages to 4.5 million customers in Connecticut, Massachusetts, New Hampshire, New York, New Jersey, Maryland, Pennsylvania and West Virginia. EL-13.

[3] PURA took administrative notice of the Witt Report on December 8, 2011.

The bulk of the electricity outages sustained in Connecticut were the result of trees and/or tree branches falling on transmission and distribution lines, downed static lines and structures damaged by snow loading or tree contact. AG-90, 4. This storm caused more than 25,000 trouble spots in CL&P's service territory. EL-13. In addition, it caused 33 transmission line outages during the storm of durations from four to 191 hours. AG-90. These transmission line outages caused further outages at twenty substations for durations of three to 94 hours. AG-91. CL&P eventually utilized nearly 3,000 crews, both internal and external, in its restoration effort and restored power to all of its customers by Wednesday, November 9, 2011. Witt, 11.

IV. ISSUES PRESENTED

A. CL&P Was Imprudently Unprepared to Respond to the Nor'easter

CL&P tracked Irene for five days before the storm hit Connecticut which gave the company ample time to prepare. This advanced warning effectively covered up the deficiencies in CL&P's major storm readiness which became more readily apparent when the October 29, 2011 Nor'easter hit Connecticut. The Nor'easter revealed that CL&P was incapable of reacting quickly to a large destructive storm.

Irene struck Connecticut on August 28, 2011, but CL&P began preparations for Irene on Tuesday August 23. Tr. 1589. On Wednesday August 24, CL&P sought to secure 200 outside line crews. CL&P increased its request to 300 the next day and to 400 on Friday August 26. EL-1; AG-54. Over 1,200 outside crews assisted with CL&P's recovery and restoration from Irene, which was complete by September 6, 2011. EL-3.

In contrast, when presented with less time to prepare in advance for the Nor'easter, CL&P proved incapable of reacting quickly. By the morning of Friday, October 28, 2011, CL&P's own forecasts showed that significant amounts of wet and heavy snow would fall on

fully foliaged trees the next day, and by Friday afternoon those forecasts called for that snowfall to be as much as a foot. While CL&P claims that it began to monitor the storm on Thursday, October 27 and acted reasonably in light of the forecast information that it had, the facts reveal that CL&P was not adequately prepared for its impact by the time that the storm hit the State and widespread outages had begun. For example, CL&P stated in an internal email sent at 5:15 p.m. on October 28, 2011 to top corporate executives that, "[a]ll of our operating units are aware of the storm and have taken appropriate measures to prepare." AG-123, bulk. At that time, however, CL&P had not requested any outside crews,[4] had not pre-positioned any employees or materials, had not set up satellite staging areas, had not deployed liaisons to the towns, had not implemented its incident command structure, had not implemented its emergency response plan ("ERP") and had not opened an emergency operations center. Tr. 1594-1596.

1. CL&P's Emergency Response Plan Was Inadequate, and As a Result the Company was Unprepared

CL&P's ERP that was in effect at the time of both the 2011 storms and remained in effect throughout the course of this proceeding is intended to "provide[]a systemic and organized approach to prepare for, and respond to, power outages caused by severe weather . . . ." Witt Ex. 3; AG-42, at 3. CL&P's ERP classifies emergency events into five classifications. They are:

> -Level I – small impact event; <10,000 affected; 1-50 trouble spots; 1-25 CL&P crews required; <12 hr. duration expected; managed at District level.
>
> -Level II – moderate impact event; <20,000 affected; 51-450 trouble spots; 26-75 CL&P crews required; 12-24 hr. duration; managed by District and Division command.
>
> -Level III – serious impact event; <40,000 affected; 451-950 trouble spots; 76-100 CL&P crews required; 24-48 hr. duration; managed by District, Division and Area command.

[4] CL&P had only requested that 30 crews already working for Northeast Utilities at that time be available on Sunday, October 30, 2011 if need be. EL-13.

-Level IV – major system impact event; <80,000 affected; 951-1800 trouble spots; 101-175 CL&P crews required; 48-72 hr. duration; managed by District, Division, Area and System command.

-Level V – extreme event major system impact; >100,000 affected; >1800 trouble spots; >175 CL&P crews required; >72 hr. duration; managed by District, Division, Area and System command.

AG-42, 22-23. The ERP also applies the principles of incident command structure, known as "ICS," to provide an effective response regardless of the size of the incident. Id. ICS, as applied in CL&P's ERP, calls for an entirely different management structure and management personnel during major storm responses. Tr. 1597. During emergencies, CL&P employees exit their normal day-to-day roles and take on entirely different duties and responsibilities. Id.

As written, CL&P's ERP presents a number of concerns. First, the plan did not adequately anticipate the scale of events that occurred with Irene or the Nor'easter. The most extreme level of events in the ERP, Level V, plans only for outages of greater than 100,000 customers with expected outage duration of 72 hours to occur once every five years. Witt, 13. That amounts to less than ten percent of CL&P's customers. The Nor'easter had over 800,000 outages, or 67 percent of its customers. In contrast, UI's ERP prepares for a worst case scenario of 250,000-plus customers, or 71 percent of its customers. Witt Report, 15. As noted in the Two Storm Report, CL&P's ERP was "not based on a worst case scenario, a cardinal tenet of disaster preparedness." Two Storm Report, 10.

Although CL&P testified that it did not view the 100,000 threshold as a maximum outage level, the ERP nonetheless indicates that CL&P did not contemplate or plan for outages on the scale that the company experienced twice in 2011. See Tr. 1451. Moreover, CL&P is now in the process of revising its ERP to provide "more specificity" with regard to the scale of events for which the company plans. Id. CL&P expects to finish its revised ERP by July 2012. Tr. 1458.

Second, CL&P's ERP was reactive. According to the Liberty Report, the description of the role of area command "is worded in such a way as to exclude proactive activation of the Area Command prior to the onset of storms such as Hurricane Irene and the October" Nor'easter. Liberty Report, 10. As stated in that report, "[a]rea Command is activated when there are numerous outages in more than one division, or when outside resources are required." Liberty Report, 10. Finally, as written, CL&P's ERP plan did not adequately stress training and drills. Liberty Report, 13, 18. In fact, the Liberty Report noted that CL&P employees questioned the plan and its application during the two 2011 storms and suggested that it was either written for regulators, not applied during the 2011 storms, lacked adequate specificity or that while it may have worked on paper it was not trained adequately. Liberty Report, 18-19.

2. CL&P Imprudently Did Not Drill/Exercise its ERP and Evaluate Results

As noted in many of the reports submitted in this proceeding, ERP's are only useful and effective if they are drilled and exercised. "The best plan is of little or no use unless the utility thoroughly trains and regularly drills responders, and the emergency response team actually uses the plan." Liberty Report, 17. See also Witt, 17. Establishing a robust training program and conducting system-wide functional exercises is critical to being able to execute an effective restoration. Davies Report, 37. Simply put, if a plan is not practiced, it cannot be carried out in emergency conditions. Responding employees must have a working knowledge of all aspects of the ERP and with their functional areas or responsibilities under the ICS. "To ensure that the employees have this degree of knowledge and are comfortable using the plan, utilities must conduct regularly scheduled drills and training activities. All key responders should be drilled or receive supplemental training at least once per year." Liberty, 7.

Drilling and exercising an ERP to prepare for large scale outage situations, such as the 2011 storms, also requires coordination with neighboring utilities as well as state and local governments. Witt Report, 17. In addition, utilities must conduct after action reviews to evaluate their performance during their drills and exercises and identify areas of improvement. Id.

There is no evidence that CL&P drilled or exercised its ERP for at least five years prior to the 2011 storms. Witt Report, 17. The Davies Report stated that CL&P has not conducted a system-wide functional exercise since at least 2007. Davies Report, 29, 37. The extent of CL&P's emergency response training was a couple of "table-top" exercises on the smaller "district" level and a walk-through in anticipation of Irene. Davies Report, 29.

Moreover, there is no evidence that CL&P ever conducted actual field training for events of the size experienced in 2011. CL&P's witnesses were not aware of any training drill or exercise that practiced the management of a workforce ten times the size of CL&P's normal workforce as was required in the Nor'easter. Tr. 1606. There is also no evidence that CL&P drilled or exercised coordination with municipal emergency response organizations on a system-wide basis as was required in the 2011 storms. Tr. 1607. In fact, CL&P's witnesses seemed to minimize the value of drills and exercises. CL&P cancelled a planned emergency response drill in 2010 because it had recently restored roughly 250,000 customers and did not see any benefit in conducting the drill. Tr. 1454. According to the company's witness, "the thinking at the time was the value added was challenged." Id. Moreover, CL&P "did not produce after-action reports" following the limited "table-top" drills that it did perform in advance of the 2011 storms. Witt Ex. 6-SP01.

As a result of CL&P's failure to drill or exercise its ERP to prepare for large scale outage events, CL&P's employees did not adequately understand the ICS organizational structure or how it should be applied in emergency situations. See Davies Report, 36. As stated in the Davies Report, CL&P "did not identify a sufficient number of people to fill critical roles and ensure that the organization could be effectively scaled to an event of the magnitude of either Irene or the Nor'easter." Davies Report, 33. As a result of this failure, in both Irene and the Nor'easter, some key decision makers at CL&P were not sufficiently familiar with the emergency response plans, the ICS, or their roles and responsibilities. Davies Report, 38.

The only training or exercising of its ICS management structure that CL&P's witnesses could identify was a "table-top" exercise conducted as Irene was already approaching Connecticut. Tr. 1600. The company acknowledged this deficiency during the hearings when it stated that this lack of understanding would be remedied by its soon-to-be revised ERP. Tr. 1458.

CL&P's failure to train and prepare for major emergency events was apparent during CL&P's response to the Nor'easter. As recommended by the Davies Report, CL&P should conduct annual exercises to test the entire system's ability to respond to catastrophic events. Davies Report, 43. Moreover, these drills and exercises should be conducted with municipalities to set expectations for the towns and CL&P in response to major outage events. Id.

B. CL&P's Actual Emergency Response Was Imprudent

CL&P's failure to drill and exercise its ERP was plainly evident in its response to the Nor'easter. The company was slow to react and stumbled its way through the first few days of this major outage event because it was not prepared to put its ICS in place and manage the emergency.

As stated in the Davies Report, before the Nor'easter struck Connecticut:

> weather forecasts identified a threat of significant heavy snow 36 hours prior to the weather system reaching CL&P's service territory. With significant foliage on the trees, CL&P should have understood the risk that the October 28 forecast of heavy wet snow would pose on the vegetation around its facilities on October 29.

Davies Report, 38. CL&P's inability to anticipate the scope of the damage from the Nor'easter affected its preparation and planning, and its ability to respond. Davies Report, 39.

1. CL&P Mismanaged the Acquisition of Outside Crews

When staffing to respond to major outage events, CL&P first calls on its own staff, then its own contractors, then crews from other NU companies, followed by mutual aid and then its unaffiliated contractors. Witt Report, 20. When CL&P had ample time to prepare for Irene, it requested outside crews before the storm actually hit the state. CL&P first requested crews in anticipation of Irene on August 25, 2011, though these crews did not arrive in Connecticut until after the storm struck the state on August 28. Liberty Report, 77; AG-52.

When CL&P had to move quickly to prepare for an emergency, as it did in the face of the Nor'easter, the company proved incapable of doing so. As a result of CL&P's failure to recognize the risks associated with the forecast it received on October 28 concerning the Nor'easter as well as its lack of practice preparing for and responding to major events, CL&P did not prepare aggressively. See Davies Report, 48.

Specifically, CL&P did not seek meaningful outside resources until after the storm hit and caused numerous service outages. Davies Report, 21. Liberty Report, 78. On the morning of Friday, October 28, weather forecasts were already calling for four to eight inches of heavy, wet snow to fall on fully foliaged trees in northern Connecticut and two to four inches in central Connecticut. Witt Ex. 30. At that time, CL&P placed its own crews on standby for October 29 and 30. CL&P did not, however, seek any mutual aid crews.

By the afternoon of Friday, October 28, the weather forecast predicted eight to twelve inches of heavy, wet snow in northern Connecticut and three to eight inches in central Connecticut. Witt Ex. 30. CL&P still did not request any mutual aid crews. Rather, it requested that thirty outside crews that were already working on Northeast Utility transmission lines in Massachusetts be available to assist CL&P starting the morning of October 30. Witt Ex. 30; EL-13; Tr. 1592.

The Nor'easter struck Connecticut around mid-day on Saturday, October 29. CL&P, however, did not make its first request for mutual aid until 5:00 p.m. that day. Witt Report, 21. AG-60. By that time, CL&P had to compete for crews with other neighboring utilities that had been more proactive. As a result, CL&P had to seek crews from further away from Connecticut which further delayed their arrival and ability to assist with the recovery. Davies Report, 48-49. On Sunday, October 30, after the storm had already inflicted 800,000 outages, CL&P requested 1,500 mutual aid crews at 10:00 a.m. and repeated this request at a 5:00 p.m. Witt Ex. 30; AG-60. Due to the regional impact of the storm, however, no such crews were available at that time. Although CL&P continued to request outside crews every day of the Nor'easter outage recovery period, the arrival of the outside crews was very gradual for the first five to seven days. Davies Report, 21.

2. CL&P Mismanaged the Outside Crews When They Arrived

Further complicating CL&P's response to the Nor'easter was the company's inability to manage the outside crews as they arrived in Connecticut. CL&P lacked the supervisory resources to manage these resources optimally. Davies Report, 48. The company did not have "a pre-defined plan for crew utilization and assignment to specific districts/area work centers." Davies Report, 50. CL&P did not use a centralized on-boarding process in Irene or the

Nor'easter that would have allowed it to process and assign crews coming into Connecticut effectively. Davies Report, 50. See also Liberty Report, 53 ("CL&P did not establish satellite (or staging) areas. Utilities should plan and identify satellite areas prior to the arrival of the storm"). This is a result of not having practiced or drilled such emergency conditions and communications. Tr. 1606, 1628; Davies Report, 55.

CL&P also did not have an adequate number of qualified personnel to optimally manage the outside crews that came to Connecticut to assist with the restoration effort. Davies Report, 51. This lack of competent management and CL&P's failure to consider the competence of its staff prior to the storm was made plain when on November 7, 2011, more than a week into the recovery and restoration following the Nor'easter, CL&P replaced the management in the Farmington Valley and Tolland County, the two areas that were still largely without power at that time. Tr. 1630. This change was necessary to remedy the company's concern with the leadership in those areas and better manage the greatly expanded workforce in those areas. Tr. 1631-1632.

3. CL&P Mismanaged its Damage Assessments

Damage assessments are critical to the restoration process. It is typically among the first steps following a major storm, sometimes coinciding with cut, clear and make safe efforts. Tr. 1637-1638. Damage assessors drive the streets to evaluate the physical condition of the electric transmission and distribution systems and report their findings back to the company. Tr. 1636-1637. The company then uses this information to plan its restoration activities. Tr. 1637-1638.

Although CL&P had a defined process for conducting damage assessments, this process was not executed well in the field. Davies Report, 63. Some areas conducted damage assessments, others did not, and others were incomplete or unreliable. Davies Report, 63. For

example, CL&P had no idea how much damage Simsbury sustained. On November 4, 2011, CL&P told Simsbury that there were fifteen poles broken and five-plus streets blocked. In reality, far more poles were broken and over forty streets in Simsbury were still inaccessible at that time. Glassman Pre-Filed Testimony, 7. Similarly, Ridgefield did its own thorough damage assessment and provided the information to CL&P, but CL&P was unable to integrate and use that information in its restoration planning. Marconi Pre-Filed Testimony, 6.

Moreover, the damage assessments were not reported back to CL&P in a timely manner and were not consistently used to plan the restoration and prioritize work. Davies Report, 64. As noted in the Liberty Report:

> CL&P had problems in both storms with situational awareness. CL&P was late in getting all patrolling complete, finishing eight days after impact in Irene, and nine days after impact in the October snowstorm. This delay affected the accuracy of restoration projections, which was a significant issue in both storms. Another issue was the communication from the field to the command center as jobs were completed. The process was labor-intensive; there were no mobile data terminals in the field vehicles, and information had to be entered manually. This also caused delay in updating restoration status[.]

Liberty Report, 89-90.

Testimony from the town leaders in this case supports this finding. Ms. Llodra, First Selectman of Newtown, testified that the first CL&P crew that it saw after the Nor'easter arrived was on Wednesday, November 2, 2011, four days after the storm hit. Tr. 2967. Moreover, Mr. Marconi, First Selectman of Ridgefield, testified that "[c]rews completing scheduled work in Ridgefield did not report that work until the end of their shifts when they returned to their depots with paperwork in hand. In some cases, town leaders did not know of work completed for 24 hours." Marconi Pre-Filed Testimony, 5. See also Llorda and Ketcham Pre-Filed Testimony, 4. Tr. 2962.

The delay in reporting damage assessments from the field to the company's operations center is not new and could have been avoided. After action recommendations following the March 2010 wind storm in southwest Connecticut suggested that CL&P provide mobile data terminals to distribution trucks to enhance field communications and assist in the damage assessment process. Witt, 24. CL&P, however, imprudently never acted on this recommendation.

CL&P's failures with respect to damage assessment were largely the consequence of its not having "a robust training and certification program for non-line damage assessors/patrollers." Davies Report, 64. Moreover, CL&P's witnesses could not recall ever drilling or exercising the damage assessment process as part of any emergency training exercises. Tr. 1638. CL&P's poorly executed damage assessment process resulted in the company's inability to assign crews effectively and likely contributed to its inability to project restoration times accurately and keep towns informed of restoration progress.

4. CL&P's Municipal Liaisons Were Poorly Prepared, Poorly Supported and Often Ineffective

CL&P formalized on paper its town liaison program after the March 10, 2010 storm in southwest Connecticut but failed to consider whether or how the program would work during an actual storm. EL-9. The idea was to assign representatives from the company to each municipality to facilitate a two-way flow of information. Liaisons were intended to provide information such as damage assessments and restoration projections to the towns and to receive from the towns their restoration priorities and preferences. EL-09.

Unfortunately, CL&P's liaison program did not prove to be effective, particularly during the Nor'easter. First, CL&P's liaisons were inadequately prepared. Although CL&P provided generic liaison training programs, the training materials were incomplete in that they focused

primarily on providing information to the towns that they served but did not adequately discuss their role in receiving information from the towns and passing that information on to the company. See Witt Ex. 42; Tr. 1156-1157. Further, prior to the 2011 storms, CL&P's liaisons had never participated in any emergency management training, drills or exercises. Tr. 1158.

Second, CL&P did not assign liaisons to particular municipalities prior to the storm event. Tr. 1156. As a result, they were not familiar with the town that they were to serve. The leaders of Redding, Newtown and Ridgefield, for example never met their liaison prior to Irene. Tr. 3036. Liaisons had no relationships with the town leaders, emergency management staffs or public works staffs. Similarly, they were unfamiliar with the electric distribution system that served that town and had no idea what the town's particular needs and restoration priorities were. See Witt Report, 25. For example, in Simsbury CL&P switched liaisons just prior to the Nor'easter. The liaison that was newly assigned to the town had no relationship with the town and no knowledge of its electrical system characteristics or the town's restoration priorities. Glassman Pre-Filed Testimony, 5.

Third, as a result of CL&P's inadequate preparation and training, its liaisons were entirely unprepared to do their jobs during the Nor'easter restoration. Many liaisons were unable to provide their towns with the sort of information that the towns desired during the outages, such as crew availability, crew locations and specific restoration projections. Tr. 1162-1162; 2946. Indeed, many towns discovered that they could learn more about the condition of the electrical system in their towns by tasking their police officers to drive the streets than by listening to their CL&P liaisons. Tr. 1166-1167. Similarly, liaisons were not able to communicate the towns' priorities and requests to CL&P effectively. For example, in Tolland, the information that the town provided to the liaison was not received internally at CL&P and the

information the town received from the liaison was generic and stale. Werbner Pre-Filed Testimony, 3. CL&P could not tell Tolland leaders where company crews were working, where the outages in town were, or provide real-time progress reports on restoration. Id., 4.

The town liaison program is important, but CL&P imprudently failed to do more than simply create a liaison program on paper and must implement significant improvements to make it effective in practice. The improvements required include providing more comprehensive training, establishing relationships between liaisons and the towns that they serve and developing a better understanding of the town's electrical system and restoration priorities. See Witt Report, 26.

UI's liaison program is more refined than CL&P's in certain respects. First, UI assigns three to five liaisons to each municipality in its service area, which allows the liaisons to staff local emergency operations centers around-the-clock and allows the liaisons to back-up each other and make sure that someone is always available. Tr. 1964-1965. UI promises 24 hour-a-day, 7 day-a-week coverage from its liaisons. Tr. 1966. Second, UI liaisons develop working relationships with their towns before storms hit, meeting with their respective towns at least annually. Tr. 1976. In addition, UI regularly conducts large training sessions for its municipalities concerning the role of the liaison process, among other thing. Tr. 1976-1977.

5. CL&P Mismanaged the Manner in Which It Handled Restoration Priorities

The restoration processes following the 2011 storms revealed a major flaw in CL&P's approach to restoring power in the 149 towns that it serves. As noted in the Liberty Report, CL&P did not establish each municipality's restoration priorities before the storms hit. Liberty Report, 114; Tr. 1076-1077; 1147. Rather, CL&P applied its own restoration priorities as reflected in its ERP; E-911 (emergency calls) first, road clearing and make safe on "major

arteries" second, critical facilities third followed by restoring the circuits that would restore the largest number of customers with the fewest crews. Tr. 1129-1130.

Many towns, including those that testified in this proceeding, however, prefer a different order of restoration priorities. They prefer that CL&P cut, clear and make safe all of their roads to emergency services first. Along these same lines, many towns in this proceeding expressed a clear desire to have CL&P assign a line crew to the town so that the town could coordinate that line crew with its public works trucks and clear roads more quickly and efficiently.

The towns needed CL&P to clear downed wires before they could clear roads to provide access for their emergency response vehicles. Following the Nor'easter, the public safety need was very real. For example, as of November 1, 2011, Simsbury identified 300 to 500 locations where trees and wires were down, blocking roads and preventing emergency access to homes and residents. As of November 7, a day after CL&P had projected that 99 percent of the town's power would be restored; there were still twenty streets impassible by emergency vehicles. Glassman PFT, 8. During this time, CL&P refused Simsbury's request to provide dedicated crews to make safe so the town could clear its roads.

CL&P's actual conduct during the Nor'easter directly contracted its public statement to make good on its pledge after Irene to coordinate with its towns.[5] Despite its public statements to the contrary, CL&P testified in this case that it would only "factor" town priorities into its restoration planning. Tr. 1084; 1151. The company stated that during a restoration it "balance[s] priorities between clearing the roads, making them safe for pedestrians and vehicular traffic and restoring customers" and that the final judgment is up to CL&P management. Tr. 1130, 1152.

[5] In an October 30, 2011 press release, CL&P stated that "[m]aking good on a pledge following Tropical Storm Irene, within 12-14 hours after the end of the storm, CL&P has at least one crew assigned to the vast majority of affected towns, with a primary focus of coordinating with the town to address emergency situations and facilitate the reopening of roads by municipalities." AG-64, 152-153.

During the Nor'easter restoration, towns including Tolland believed that CL&P focused on mass restorations at the expense of public safety. See Werbner Pre-Filed Testimony, 4, 6. Simsbury also believed that CL&P sought to restore the largest number of customers first without recognizing the town's need to have certain locations restored more quickly than others for public safety purposes. Glassman Pre-Filed Testimony, 3.

Again, UI's approach regarding restoration priorities provides an instructive contrast. UI meets with its municipalities annually to identify and establish each town's restoration priorities as well as their preferred order of restoration. Tr. 1998; 2019. In the past, UI allowed the towns to choose two priority facilities, but now allows as many as ten or more, and verifies that list with the towns annually. Tr. 1998-1999. In addition, prior to Irene UI called its towns to verify their priorities. Tr. 2000.

UI testified that most of the municipalities in its service area have identified road clearing, or cut, clear and make safe as their top priority in any major restoration. UI's towns want to "clear the roads so that they can get police and fire through the roads, rather than address their priority circuits." Tr. 2024. UI partners with the towns to accomplish this goal, often seeking to open the roads and getting town EOC's and other priorities on line first. UI advises the towns that clearing roads first can extend the duration of the overall restoration, but will not substitute its judgment for that of any town that makes that choice. Tr. 2022-2023. After clearing the roads, UI then progresses through each town's list of restoration priorities, which are often town EOC's, shelters, water treatment facilities and assisted living facilities, followed by restoring power to the greatest number of customers with the least effort. Tr. 2024; Tr. 2037.

UI also provided one line crew and one line clearance crew to any town that requested such assistance at the beginning of the restoration process to work with the town's public works

department to clear roads. Tr. 2051; Tr. 2498-2499. These "embedded" crews are then used at the direction of town officials. Tr. 2499. While this step can delay the completion of the overall restoration because it takes UI crews away from that effort, towns tend to prefer this approach because it allows them to directly address their public safety needs and clear roads more quickly. Tr. 2499. As noted supra, many municipalities in CL&P's service territory have requested similar services from CL&P, but CL&P did not generally embed its crews with towns. In the few cases in which CL&P crews were embedded with town crews, perhaps in contravention of CL&P's general policy, it worked well. Tr. 2969.

PURA should, in this case, restore the importance of the word "public" in the term "public service company." CL&P's primary function as a public service company is to serve the public. With respect to major storm restoration, that should mean working with towns to identify their restoration priorities and make all reasonable efforts to defer to those priorities.

6. CL&P Mismanaged Its Communications with Municipalities and the Public

Complete and accurate communications between utility companies and the municipalities and public they serve concerning the extent of storm damage and estimated restoration times ("ERT") are a critical part of any service restoration effort. Following the Nor'easter, customers' and towns' primary concern was getting accurate information from the Company. Miller/DeVito/Townsley PFT, 26. Residential customers "needed to make decisions about such things as whether they should stay in their home or go to a motel or shelter or move in with relatives, whether they should move elderly parents, or whether they should purchase a back-up generator." Miller/DeVito/Townsley, 26. Moreover, towns needed to meet the needs of their

residents by opening and staffing shelters, planning public works crews as well as making decisions about school closings and polling places for the November 8, 2011 elections.[6]

As Mrs. Llodra stated in this proceeding:

> the lack of real honesty in the communication is really what started to wear me down and wear the community down. We can handle the bad news. We can prepare for that bad – bad event if we . . . have some confidence that what we're being told is accurate.

Tr. 2977. "[W]rong information is far worse for us and our citizens than no information at all," testified Mrs. Ketchem, First Selectman of Redding. Tr. 3026.

CL&P, however, did not provide complete and accurate communications concerning projected restoration times to the towns most severely affected by the Nor'easter. Even after it had become readily apparent to the towns in the Central Division that restoring power to 99 percent of customers in those towns by midnight of November 6, 2011 was unrealistic, CL&P stubbornly and imprudently refused to back off that goal, a goal which it set for itself just two days after the storm hit and before it had any idea of the extent of the damage that the storm inflicted on these towns.

a. CL&P Repeatedly Reaffirmed its Commitment to Its 99 Percent Restoration Projection in Each Town It Served by Midnight on Sunday, November 6, 2011, and Many Relied on that Commitment

The Nor'easter struck Connecticut on Saturday, October 29, 2011. Just two days later, on October 31, CL&P internally established its goal of restoring power to 99 percent of all its customers by midnight on Sunday, November 6, 2011. Tr. 2745. On Tuesday, November 1, 2011, CL&P publicly announced this goal. Tr. 1168-1169. On November 2, 2011, CL&P

[6] For example, CL&P's inability to provide accurate restoration projections "had a material adverse impact on the town's ability to protect the health and safety of town residents." Glassman PFT, 5. Simsbury had no accurate information on which to schedule its shelter operations and care for its elderly and disabled. Id.

projected that it would restore power to 99 percent of customers in each of the 149 municipalities that it serves by midnight of November 6. Liberty Report, 111. CL&P then repeatedly restated its commitment to achieve this goal in press conferences, on its website and directly to local municipal officials via its liaison program. Tr. 1863.

CL&P's briefing sheets for its daily press conferences during the outage following the Nor'easter included such statements as:

> -Wed., Nov. 2 – "we continue to drive to 99% restoration for all customers by midnight Sunday . . . ."
>
> -Thurs. Nov. 3, a.m. – "we continue to work toward 99% restoration by midnight Sunday . . . ."
>
> -Thurs. Nov. 3, p.m. – "we continue to strive for 99% restoration for ALL towns by Sunday at midnight."
>
> -Fri. Nov. 4 a.m. – "we will continue our aggressive pace toward 99% restoration by Sunday . . . ."
>
> -Nov. 4 p.m. – "By Sunday at midnight 99% of all our customers in all of our towns will have power."
>
> -Sat. Nov. 5 a.m. – "we continue to make solid progress on our aggressive goal of having 99% of our customers with power by midnight Sunday."
>
> -Sun. Nov. 6 a.m. – "our goal remains to have 99% of our customers restored by midnight tonight."

AG-120.

These daily briefing sheets also included suggested answers to questions that may be asked at the briefings. Starting on the afternoon of November 3, 2011, the recommended response to the suggestion that CL&P's own crews are saying that 99 percent restoration by

Sunday, November 6 is not attainable was, "sometimes when you are out in the trenches working on the restoration, it's difficult to see the big picture." AG-120.

Testimony provided in this proceeding makes clear that CL&P communicated its 99 percent restoration by town by November 6 as much more than a goal or estimate to municipal leaders. To Mr. Galligan, Town Manager of South Windsor, the CL&P liaison stated that the 99 percent restoration by midnight November 6 was a "guarantee" and that the remaining one percent would consist of homes that lacked power because their service or drop (the power line from the street to the home) was damaged. Tr. 1864. To Mary Glassman, First Selectman of Simsbury, the 99 percent goal "was communicated as they were confident that they would meet their projection." Tr. 1866. To Mr. Werbner, Town Manager of Tolland, the CL&P liaison presented it as a "guarantee that was going to be achieved." Id. As stated in the Witt Report:

> [w]hen this goal was released to the public in media events early in the week after the storm, it was perceived by the public and communities as a promise or deadline for restoration of 99 percent of customers by that date, and this perception was not corrected by the company.

Witt Report, 22.

Even after officials of the towns most severely affected by the Nor'easter, such as Tolland, Simsbury and Windsor, expressed their doubts that CL&P would be able to meet this 99 percent restoration projection, CL&P held fast and reiterated that it would restore power as promised. Id. As stated by Steven Werbner, Town Manager of Tolland, "they kept insisting that by midnight on Sunday we would be fully restored." Tr. 1867. Indeed, on November 4, 2011 a number of public officials representing towns in the Farmington Valley offered to appear publicly with CL&P and clarify that the company would not make its November 6 restoration projection, but CL&P refused. Tr. 1874. In a press release that was issued following this meeting, Mr. Quinlan, CL&P's Vice President of Customer Solutions, was quoted as saying

"[t]here is no question that this is a daunting challenge . . . but we are confident that power can be restored in this time frame."[7] AG-101, p. 1234.

Some town leaders that testified in this proceeding found CL&P's 99 percent projection unrealistic and did not rely upon it. Mr. Galligan testified that "I didn't believe them, so I just went ahead because I knew at that point on that Saturday [November 5] that we still had 22 roads that needed to be cleared." Tr. 1868. Ms. Glassman stated that on November 4, 2011 when Simsbury was still 84 percent without power, CL&P reiterated that it would restore power to 99 percent of the town by November 6. Glassman PFT, 6. Yet, on November 8, more than 30 percent of town was still without power. Id. Glassman further testified that "we made our own assessment that the CL&P projection was not accurate and so we staffed up our emergency shelter for a longer period of time. . . . We didn't accept the projection, so we did follow our own instincts." Tr. 1869. Mr. Werbner of Tolland went a step farther. He testified that he actually advised his community "that the projections were not going to be met and that there was no way they could be, so don't rely on that." Tr. 1870.

Unfortunately, however, other towns did rely. Mrs. Ketcham, First Selectman of Redding, testified that had CL&P been more honest with the town's school system the schools would have closed for the week and their residents could have made alternate arrangements. Tr. 2979. Instead, "because we could only operate on a 24-hour period, we weren't able to take advantage of any kind of comprehensive advance planning." Tr. 2979-2980. Similarly, Newtown – like many other municipalities – had to make difficult decisions about sheltering its residents, some of whom had fragile medical conditions. As Ms. Llodra stated:

[7] Curiously, during the hearings in this proceeding, Mr. Quinlan questioned whether he was quoted accurately in this press release. Tr. 1662-1663. Of course, it is highly unlikely that this press release including a quote from Mr. Quinlan would have been publicly released without CL&P review and approval.

> it makes a difference knowing how long you have to provide those resources and whether or not you can manage someone in place or have to remove that person to a . . . location where medical supports or care can be provided. . . . It wasn't until we were a couple of days into it that I chose to disregard the projections and just make a decision based on what I thought was needed for the welfare of the persons I was most concerned about.

Tr. 3029.

Moreover, many CL&P customers in the hardest hit towns did rely on the company's 99 percent restoration projection. Many residents that had left their homes during the early stages of the outage returned to their homes on Sunday November 6 with the expectation that power would be restored by that night. These residents then called their town halls to complain that the power was not in fact back on. Tr. 1869. As Ms. Glassman testified, "I think the wheels just fell off on Monday when people came home and there was still no school. There was still no power, there was still no water." Tr. 1871. Mr. Werbner stated that Monday November 7, after the 99 percent projection had been missed, "was really the drop-dead day that people lost all civility in terms of how they were approaching the situation, and it was that inability to properly plan." Id. Similarly, Ms. Llodra testified that when CL&P did not reach its restoration projection, it "create[d] another whole layer of anger and anxiety and lack of confidence . . . ." Tr. 3025.

Businesses also relied on the 99 percent projection. Mr. Galligan stated that, "we had a few businesses in town that thought that power was coming on. One was Nardi's Bakery on Route 5, and he brought in his crew for that Monday to start baking breads . . . ." Tr. 1872. Even ISO New England, Inc. reviewed CL&P's website to get an indication of restoration projections as part of its constant evaluation of the electrical grid in New England and to plan for power requirements. Miller/DeVito/Townsley PFT, 32.

Of course, despite maintaining as late as the morning of Sunday, November 6 that it would restore power to 99 percent of the residents in every town that it served by midnight, later

that day even CL&P acknowledged that it would not make its restoration projection. AG-120. This came as no surprise to the many town officials, especially those who still had many roads that were impassable and residents living in their shelters. See, tr. 1868-1970.

b. CL&P Refused to Provide Accurate Restoration Projections to the Towns Most Severely Affected

CL&P did not come close to meeting its 99 percent restoration projection by November 6, 2011 in many towns in its Central Division. EL-16. Specifically, 58 towns were below 99 percent restored by that time, many of them well below, including:

Town	Percent Out of Service as of Monday, November 7 at 6:00 a.m.
Somers	42.4
Union	42.2
Farmington	39.72
West Hartford	38.14
Bloomfield	33.85
Simsbury	31.03
Stafford	30.78
Tolland	28.25
Granby	25.5
Vernon	25.06
Windsor Locks	23.3
Avon	23.09
Canton	19.09
Ashford	19.07
Willington	19.05
Ellington	18.71
Suffield	18.37
Burlington	15.76
South Windsor	11.01
Hartland	10.25

AG-101, at 644.

The entire Central Division was only 82 percent restored at midnight of November 6, 2011.[8] Clearly, CL&P knew or should have known long before November 6, 2011 that it would not restore power to 99 percent of the residents in many of the Central Division towns by that time. The company, however, refused to acknowledge this fact publicly, thereby perpetuating and exacerbating the harm done by setting and holding to this restoration goal. In fact, CL&P continued to assert its public commitment to restore 99 percent of its customers by midnight November 6 right to the last moment, even as it knew how unlikely that was. Notes from Mr. Bowes apparently taken November 6 state as follows:

Restoration Projections

- CL&P remains committed to restore 99% of its customers tonight – statewide goal 92% at present
- 31 of 149 towns may not achieve 99% by midnight tonight 4 < 95%

LF-68-SP-02, Attachment 3.

At the same time, CL&P was acutely concerned with its public image and how the public and political officials viewed the company. See AG-112. During Irene and the Nor'easter, CL&P retained, at shareholder expense, multiple outside media consultants and during the Nor'easter retained two public relations firms to "look at the reputation issues as a result of the storm" and help "shape messaging." Tr. 1175-76, 1186; AG-112 at 82-83. Among other things, these public relations firms not only monitored social network outlets such as Facebook and even suggested submissions for "non-employees" to post, though it appears that CL&P did not follow through on such suggestions. AG-112, at 331-332; Tr. 1178. The public relations firms also conducted numerous public opinion polls and telephone surveys to assess CL&P's favorability

[8] 82 percent equates to slightly more than 54,000 customers without power. In contrast, 99 percent equates to approximately 3,000 customers without power. CL&P clearly missed the mark by a wide margin in the Central Division.

ratings and the public attitude toward the company and its restoration. Tr. 1181. These firms also advised CL&P as to proposed next steps, including "reaffirming credibility of NU" and repositioning the company's reputation. AG-112, at 75; Tr. 1183-1184.

The testimony presented by town leaders in this proceeding makes clear that the towns and their residents understood the severity of the storm and also understood that the restoration would require a massive effort that can take time. They merely wanted and deserved honest assessments from CL&P, not aspirational objectives established two days after the storm hit that quickly became unrealistic. Instead of stubbornly ignoring the realities of the situation, CL&P's best approach to protect its reputation and cultivate a more positive public opinion would have been to be more honest and forthright about projected restoration times in the towns hardest hit by the Nor'easter, even if this meant revising its original projections.

Although the Nor'easter had significantly less impact on UI than CL&P, UI's management of the restoration projection issue is instructive. On Sunday, October 30, 2011, the day after the Nor'easter hit Connecticut, UI notified the towns that it serves that it expected to have most of its customers restored by midnight on Monday, October 31, 2011. EL-13, page 5 of 9. At that time, 16,767 UI customers, roughly five percent, were without power. Id. On Monday, October 31, 2011, however, UI recognized that it would not achieve its restoration goal. It therefore announced to its towns that its prior projection was based on the number of service outages known at the time and that since that time an additional 9,000 customers have reported losses of power. Id., page 7 of 9. Because of those additional outages, UI acknowledged that it would not restore all power that night but also stated that it would work around-the-clock to restore service. Moreover, UI stated that restoration times will be provided for some customers when trucks have been dispatched to their locations. Id.

7. CL&P Has Repeatedly Failed To Accurately Inform the Authority and Other Storm Investigators How it Determined Restoration Projections

Extended power outages place enormous stress on the towns and residents affected. Both Tropical Storm Irene and the Nor'easter were among the largest natural disasters in Connecticut history. Moreover, because the Nor'easter caused a prolonged power outage in November, cold temperatures presented new challenges and dangers to Connecticut citizens.[9] On November 1, 2011, CL&P's President and Chief Operating Officer Jeffrey Butler released the company's projected restoration estimates and committed to restoring 99 percent of its customers by midnight November 6, Tr. 1701, and on November 2, committed to restoring 99 percent of its customers in each municipality by midnight November 6. Liberty Report, 111.

CL&P failed in its 99 percent restoration goals and failed badly. By 6:00 a.m. on November 7, the company had restored 99 percent of its customers in just 91 of 149 municipalities. Tr. 2704-2705; AG-101-664-65. Several of the towns in central Connecticut had outage rates near forty percent and the average outage rate for the top twenty towns was nearly thirty percent. Id.

As the record in this matter reflects, towns and their residents relied upon the utilities' restoration projections in making important decisions, Tr. 1170; Tr. 2524, and CL&P's failure to meet its 99 percent restoration projection for all towns throughout its service territory had profound consequences for those towns and residents. Not surprisingly, CL&P came under substantial criticism for its failure to meet its restoration commitments and for its storm response in general. By November 4, 2011, the Governor had already engaged James Witt, former

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[9] For example, many hundreds of people were injured by carbon monoxide poising by operating gasoline powered generators or charcoal grills too close to their homes. Hartford Courant, November 4 at http://www.courant.com/news/politics/capitol-watch/hc-clp-no-power-20111104,0,6599689.story.

director of the Federal Emergency Management Agency, to conduct an independent investigation into the utilities storm response even as CL&P's restoration efforts continued.

The Witt Report, issued on December 1, 2011, was the first of many separate investigations into the utilities storm response, including reports issued by the Governor's Two Storm Panel, Davies Consulting, the Liberty Consulting Group and the Townsley Consulting Group. Obviously, CL&P's methodology for determining estimated restoration times has been of significant interest to all of these investigating entities as well as to the PURA in this proceeding.

CL&P has repeatedly represented to this Authority, as it had to the Witt investigators, that the restoration projections were based on a formula described in the ERP. However, CL&P's repeated claims that it applied a formula or specific methodology to generate its restoration projections are simply not supported by the facts in evidence. The record shows that none of the alleged "models" CL&P claims it employed to determine the estimates were in any way capable of generating a reasonable restoration estimate and was in fact not used to do so. These models were simply not designed or intended to assist in generating an accurate restoration estimate after a storm of this magnitude, where the company is unable to ascertain the extent of the damage and is unable to estimate with any confidence the number of outside work crews that will be available to assist restoration estimates. Under such circumstances, the critical determinant variables at the time that the restoration projections were released publicly are unknown and unknowable. Tr. 2708-2709.

Recognizing that the record is not complete and CL&P's testimony inconsistent, the evidence in this proceeding appears to show that NU's top management determined very soon

after the Nor'easter hit that its 99 percent restoration target would be midnight November 6. [10] This restoration target was determined by Charles Schivery,[11] Leon Olivier and Michael Ahern most likely on October 30-31, Tr., 2746, and was clearly independent of any restoration estimates produced under the guideline or models specified in the ERP and occurred at least one day prior to the estimates developed through CL&P's "formula." Tr. 1701-1704, 2746. Indeed, the goal was not based upon any projected computer modeling or analysis, but was simply based upon Ahern's gut feeling that the Company, consistent with its performance after Tropical Storm Irene, likely could sustain a rate of 100,000 restorations per day. Tr. 2755-57. With 800,000 customers without power after the Nor'easter, Ahern concluded the complete restoration would likely take eight days and that CL&P would reach 99 percent by November 6. Tr. 2755-57. Ahern provided Olivier and Schivery with daily reports on the Company's progress on the "glidepath" to that 99 percent restoration estimate. AG-101, 90-98.[12]

a. CL&P's Projection Model – Explanation Number 1

Rather than simply explaining that the restoration projection was based on a gut feeling and experience from previous storms, CL&P has repeatedly represented to investigators and PURA that the restoration projections were determined based on a formula. Immediately after the Nor'easter CL&P, through its witnesses Kalbfleisch and Hybsch, represented to Witt

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[10] At 5:00 p.m. on June 7, two business days before filing briefs, CL&P belatedly provided 120 pages of handwritten notes by senior management during the daily "operations calls." These notes are contemporaneous records of the Company's management and progress of the restoration effort, progress in meeting the restoration commitment curve, and communications with State and local officials concerning restoration progress. The Attorney General over six months ago specifically asked for these documents in written interrogatories. During the course of this proceeding, the Officer repeated this request. Significant is that certain notations may indicate that CL&P remained publically committed to 99 percent restoration by midnight November 6 even as it recognized that 31 towns might not achieve that goal. The Attorney General reserves the right to fully address the substance of this production in its reply brief.

[11] Chief Executive Officer, Northeast Utilities.

[12] Of course, as discussed supra, for Irene CL&P had made its request for outside crews three days before the storm hit while for the Nor'easter, CL&P did not request mutual aid crews until several hours after the storm hit.

Associates that it had relied upon a "formula" for determining when it would complete its service restoration. See Witt-37.[13] In that data response, CL&P stated that:

> [t]he estimated time to restore methodology and calculations for Storm Alfred was developed and implemented in accordance with the CL&P Emergency Response Plan (CL&P ERP) Section 3.7 (page 18 of 42) listed below.
>
> **Estimated Restoration Time = (Trouble spots) x (Average time to restore) / (# of Crews)**

Witt-37, page 1 of 2. (Emphasis in original).

In the attachment to the response, CL&P showed the application of the "Rule of Thumb Estimate for the October Snow storm based on actual information from October 30 2011 @ 23:00." The application purports to show how CL&P used the "formula" to calculate an estimated 100 percent restoration time of November 9. CL&P testified that the purpose of the formula was to take the number of trouble spots, multiplied by the average time to restore a trouble spot, and divide by the number of crew hours available to work those trouble spots to "solve" for the estimated restoration time. Tr. 1643-1646.

> CL&P's model is designed to estimate 100% restoration projections. The initial projection for 100% restoration was November 9, 2011. To estimate the 99% restoration projection, we applied historical restoration curves to the 100% projection of November 9, 2011. After following this model, CL&P estimated that it would take 3 days to restore the remaining 1% of customers.

Witt-18; Tr. 1671-1672. CL&P adopted its answers to the Witt report at the beginning of the hearings in this case. CL&P witnesses testified that they relied upon the document provided in Witt-37 in determining the 100% restoration date and "backing into a 99 percent estimate." Tr. 1672. However, as became apparent during this hearing, the formula presented in Witt-37 does not work. Applying CL&P's formula to the Tolland district, for example, estimated restoration date does not yield November 9, as reflected in the exhibit, but instead yields a December 4

[13] CL&P adopted its answers to the Witt Report at the hearing in this case. See Tr. 960.

restoration estimate, or 35 days from October 30. Tr. 1675. For CL&P's overall service territory, the "formula" yields an estimated restoration date of sixteen days, or nearly double the time calculated on Witt-37. Tr. 1678.

On March 23, CL&P witnesses met with attorneys from the Office of the Attorney General to review the calculations in the "formula" presented in Witt-37. Tr. 2716-2716. CL&P's witness Rod Kalbfleish, the Area Commander for the Nor'easter and the official principally responsible for the overall restoration efforts, was unable at that time to explain why the "formula" did not work to provide the November 9 restoration date despite November 9 appearing as the "solution" to the restoration time. During the May 21 hearing in this matter, Kalbfleish testified:

> 15 A. (Kalbfleisch) I was not aware that
> 16 those were -- the errors were in there at
> 17 that time.
> 18 Q. (Wright) You were unable to explain
> 19 to Attorneys Cole and Martella how the
> 20 calculations could not have -- why they did
> 21 not work?
> 22 A. (Kalbfleisch) Well, my first
> 23 assumption was maybe the tool had -- was
> 24 broken. I didn't -- I did not know why the
> 25 numbers did not add up, so I needed time to
>
> 1 go back and analyze and figure out what
> 2 happened.

Tr. 2716-2717.

Kalbfleish's response here is revealing in that it demonstrates that the "formula" or "model" as presented in Witt-37 on November 10, 2011 was not used to calculate an estimated restoration time. First, the model assumed that complete restoration would be achieved by November 9 *based upon a crew count of 338*. Tr. 1682, Witt-37. As we know, the number of crews was changing daily and eventually rose to more than 1,800. EL-18. When confronted

with this anomaly, Kalbfleish responded "I also know I have requested I believe it was 750 crews." Tr. 1683.

b. CL&P's Projection Model – Explanation Number 2

During the April 26 hearing in this matter, CL&P explained that the errors identified in the Witt-37 document were produced because the "estimate of 6 hours per trouble spot was not initially used for all area work centers ("AWCs") in the 10/30/11 @ 23:00 snapshot." See LF-68 Supplement at 4. CL&P represented that its Area Planning Chief had accidentally used two hours per trouble spot rather than six hours per trouble spot. Tr. 1684.[14]

CL&P, however, acknowledged that it did not know how many crews it would have during the restoration, Tr., 1682, and that it did not have accurate calculations for trouble spots. Tr. 1682. In other words, the restoration estimate from Witt-37 is based upon data that CL&P admitted was unknown and unknowable at the time. Thus, whether a two or six hour estimate is used, the formula simply cannot work.

> 11 Q. (Wright) And I think we also
> 12 discussed and you agreed that the other
> 13 inputs to the formula, namely the number of
> 14 crews that would be available and the number
> 15 of actual trouble spots were unknowable at
> 16 the time?
> 17 A. (Kalbfleisch) We knew the number
> 18 of crews we had requested, and we have an
> 19 estimate of what the number of trouble spots
> 20 could be, but you are correct.

Tr. 2708-2709. At the conclusion of the hearing on April 26, CL&P declined to redirect its witnesses on their restoration estimates and instead sought permission to submit a late filed exhibit "which would be supplemental information regarding our restoration calculation." Tr. 1725.

[14] In fact, substituting two hours for six hours still does not yield a November 9 restoration estimate, but a November 6 estimate. Tr. 1689-92.

c. CL&P's Projection Model – Explanation Number 3

On May 16, 2012, CL&P filed LF-68, in which it provided yet another explanation of how it calculated estimated restoration times. LF-68 describes a radically different process for calculating restoration estimates than those CL&P has provided to any of the consultants, attorneys or parties to this proceeding. In LF-68, CL&P apparently abandoned any further attempts to defend the modeling it presented in Witt-37 and instead provided a completely new estimation methodology, one that relies very heavily on the judgment and expertise of its employees or, as the company described it, "extrapolations based upon the application of logic and experience." LF-68 at 1. These extrapolations include, but are not limited to:

> (i) historical storm restoration curves, including for example the fact that less than two months earlier (using the same formula, methodology and data collection process) CL&P achieved its internal restoration projection to restore 100% of customers for Tropical Storm Irene by September 7, 2011 at midnight over one day early on September 6, 2011);
> (ii) experience from prior storms;
> (iii) knowledge of and experience with CL&P's electric system;
> (iv) knowledge of current system conditions;
> (v) expectations about how many additional crews will be available and when additional crews will be available;
> (vi) knowledge and experience about the process CL&P uses to collect and input data during the storm restoration process, including the Company's knowledge that data collection is an imperfect process, and during an event of this magnitude there will be delays in the collection and inputting of data and there will be understated and/or inaccurate data; and
> (vii) any other factors and data deemed relevant by CL&P based on logic and experience.

Id., 2-3.

These "extrapolations" are extremely subjective, broad and are not necessarily described elsewhere in the ERP. For example, CL&P for the first time after six months of investigation disclosed that, in calculating the number of trouble spots:

> CL&P determined that approximately 6,000 of those 14,757 interruptions were instances where electric service connections that connect individual customers to

> utility poles were damaged (which are referred to as single "service-related" interruptions). Consistent with past practice, CL&P subtracted the estimated 6,000 "service-related" interruptions from the gross 14,757 interruptions to yield a net total of 8,757 interruptions.

Id., 3.

CL&P's witnesses testified that this practice was not described in the ERP but nonetheless reflects "the person's experience, knowledge and insight into what type of storm it is." Tr. 2710-2711. CL&P further included in the model 1000 line crews that it had "ordered" but had previously not reflected in Witt-37. Tr. 2714.[15] Again, this revelation comes only after six months of review and analysis of CL&P's estimated restoration methodology.[16] In addition, CL&P revealed for the first time – again six months into the investigation - that it included a three day buffer for cut, clear and make-safe work, extending its restoration estimate from 8 to 11 days. LF-68 at 4.

d. <u>Conclusion</u>

CL&P has given two completely incompatible "models" for its projection estimates. Indeed, CL&P's latest explanation is flatly inconsistent with CL&P exhibits and previous witness testimony in this proceeding. The first model is largely mechanistic and driven by a formula. This is the model first presented to Witt Associates and then to the Authority in this proceeding. As fully demonstrated above, however, this model does not and cannot provide reasonable estimates under severe outage conditions such as the October Nor'easter. Moreover,

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[15] In fact, it appears that on October 30, 2011, CL&P did "request" 1,000 crews but it had received commitments for only 400, the majority of which were not expected to arrive until at least November 2, 2011. AG-101, 340.

[16] This 1000 crew figure is also inconsistent with Kalbfleish's earlier testimony in this proceeding that he had ordered 750 crews, not 1000. "I also know I have requested I believe it was 750 crews." Tr. 1683. Kalbfleish at the time acknowledged that he did not know whether he would get the 750 crews. <u>Id.</u> The witness never suggested at the time that those 750 – or 1000 – were actually added as crew in the Witt-37 formula. Of course he could not have known that at that time – for as we have seen earlier Kalbfleish testified he believed the formula would "solve" correctly at 338 crews. Tr. 2716-2717.

even though CL&P adopted its answers to the Witt report at the beginning of the hearings in this case, it did not reveal the errors in Witt-37 until pressed by the Attorney General at the hearing on April 26, 2012. CL&P thereafter presented a second projection methodology. This second "methodology" is so layered with subjective judgments, insights and assumptions that it is practically meaningless. Moreover, because this second model relies principally upon subjective criteria, it is not subject to any meaningful reasonableness review.

There is substantial evidence in the record that CL&P did not rely on either model at the time it made the restoration projections. Witness testimony supports that NU officers – Olivier, Schivery and Ahern - very early in the Nor'easter restoration used their judgment in establishing their own internal restoration "glidepath" some time on or before October 31. Tr. 2746. There is of course nothing inherently wrong with this. In fact, given the inadequacy of any formula to "model" a restoration estimate under the severe outage conditions, such a judgment probably represents the best the Company could have done. What is wrong, however, is CL&P's repeated attempt to provide inaccurate information about how it determined the restoration projections. To date because of CL&P, the record is simply incomplete and inconsistent. CL&P has failed to fully and fairly inform the Authority and the parties, despite repeated requests, how it determined the projections. In order for this Authority, or any of the storm investigators, to properly assess CL&P's conduct and determine procedures to improve its storm response, CL&P must provide accurate, complete information. The Attorney General respectfully requests that the Authority consider CL&P's conduct in determining an appropriate penalty in this case.[17]

[17] In contrast to CL&P, UI's witnesses frankly acknowledged the limitations of their restoration projections in severe outages, where the number of unknown variables makes any projection model too speculative to be reliable. Tr. 2514-16.

C. UI

In general, UI's preparations for and response to the 2011 storms proved to be much less controversial than that of CL&P. Indeed, as noted herein, certain aspects of UI's response provides a useful point of comparison when evaluating that of CL&P. UI's response, however, was far from flawless and PURA should in this case find that a number of areas are in need of significant improvement.

1. UI Communications

UI experienced a number of failures with respect to customer communications when responding to the 2011 storms. First, during Irene, UI's internet "crashed" and was unavailable to its customers because it could not handle the volume of visitors. Tr. 1963. Typically, UI's website has about 50,000 visitors a day, but during Irene it had over 200,000 visitors a day. Id. UI's internet was also unreliable and intermittently unavailable during the Nor'easter. Tr. 2917. The internet is a primary source of information to customers, and its unavailability had a profoundly negative impact on the company's ability to communicate with its customers. UI has since taken steps to increase its ability to handle increased visitor volume on its website. Tr. 1964.

Second, UI understaffed its call center prior to the Nor'easter and was unable to ramp up its staffing to appropriate levels as quickly as it needed. Liberty Report 149; Tr. 1928-1929. UI also had an inordinate number of busy signals received by those calling into its service center. Tr. 2401. Like the crashing of its internet, the company's shortcoming at its call center severely curtailed its ability to communicate with its customers during this major emergency.

During the hearings in this case, UI acknowledged its staffing shortcomings at the onset of the Nor'easter but claimed that it did so because it underestimated the storm. Specifically, it

testified that "[w]e were anticipating more of a rain event at first versus a snow event." Tr. 1929. This explanation, however, is inconsistent with detailed timeline that UI provided to PURA in this investigation which clearly shows that UI did not underestimate the potential for a major snow storm. According to that timeline, at 4:00 p.m. on Friday, October 28, 2011, the day before the Nor'easter struck Connecticut, UI warned residents "to prepare for possible snow outages due to heavy snow" and stated that, "[a]ll municipalities are notified that the UI Storm Center will be staffed and open on Saturday." EL-13.

2. UI Did Not Adequately Drill or Exercise Emergency Response

UI adopted a new and updated Emergency Response Plan in 2011 to replace its 2006 plan. The 2011 ERP adopted an incident command structure, which was a departure from the 2006 plan. Tr. 2482. As with CL&P, this ICS required that an entirely different management structure and plan would apply during emergency conditions, including different duties and responsibilities as well as different lines of reporting. Tr. 2481-2482. UI conducted drills and exercises to practice the implementation of its ERP, but last did so in 2009. In other words, UI had not, prior to the 2011 storms, drilled or exercised its updated ERP and its ICS. Tr. 2483. In addition, the company's 2009 drill did not include practicing the management of large numbers of outside crews. Tr. 2489.

In addition, although UI conducted internal "classroom" type training for its liaisons annually, prior to the 2011 storms it did not conduct emergency drills or exercises to practice and evaluate the performance of its liaisons. Tr. 2028; 1978-1979. The company acknowledged, however, that such training sessions would be extremely valuable in addition to its annual internal training sessions. Tr. 1978-1979. UI's hands-on liaison training only occurred if a particular town was conducting its own exercise. Tr. 2029.

3. Damage Assessment/OMS

UI acknowledged during the hearings in this case that its damage assessment process is largely paper based and, therefore, is far less efficient than it could be. UI damage assessors filled out damage reports on paper and then physically returned those reports to the company's offices. Tr. 2467. UI then manually compiled that information and entered it into its databases, unless the damage assessors happened to call the information in over the phone. Tr. 2504. UI then produced paper-based work packages for its crews. Tr. 2401-2402.

This process was time and manpower consuming. UI acknowledged that it does not take full advantage of some state-of-the art systems, such as mobile data terminals which would allow for wireless transmission of damage assessments to the company's central scheduling system which would compile the data and create work schedules and a resource plan. Tr. 2506. Such a process would not only expedite the damage assessment process, but would also expedite the compiling and use of that information.

D. Vegetation Management

For CL&P, falling trees or tree branches were responsible for 90 percent of the utility wires that fell during both Irene and the Nor'easter. Tr. 1255; Two Storm Report, 13. For UI, tree strikes caused virtually all of the outages sustained in the 2011 storms. Tr. 2090. Although more frequent and aggressive tree trimming will not prevent all tree related outages, it can reduce the number of service outages in storm situations.

1. Background

In Docket No. 09-12-05, Application of the Connecticut Light and Power Company to Amend its Rate Schedules ("Docket No. 09-12-05"), the Attorney General recommended that the DPUC (PURA's predecessor agency) increase CL&P's proposed level of spending for reliability

purposes to improve its tree trimming operations. Brief of the Attorney General, Docket No. 09-12-05, 4.[18] Specifically, while CL&P proposed funding sufficient for a 5.1 year trimming cycle, the Attorney General asked the DPUC to increase CL&P's annual funding for tree trimming to levels sufficient to fund a four year trim cycle. Id., 7.

The DPUC ultimately approved funding for essentially a five year trimming cycle for CL&P. Tr. 1259. Under CL&P's plan, the company intended to trim approximately twenty percent of its nearly 17,000 pole miles of distribution lines each year, or roughly 3,400 miles per year. AG-13; AG-14. Over the last ten years, however, CL&P rarely trimmed that many miles in any given year. Specifically, CL&P trimmed:

- 2764 miles through November 2011;
-2010 – 3304 in 2010;
-2009 – 3260 in 2090;
-2008 – 3209 in 2008;
-2007 – 2647 in 2007;
-2006 – 2453 in 2006;
-2005 – 2372 in 2005;
-2004 – 2384 in 2004;
-2003 – 2960 in 2003;
-2002 – 2644 in 2002; and
-2001 – 3532 in 2001.

AG-84. CL&P claimed in this case that although it reached less than twenty percent a year, it focused on the areas that would provide the greatest benefit, particularly the circuits with poor reliability and those that had not been trimmed in the longest period of time. Tr. 1259-1261.

CL&P began conducting "enhanced" tree trimming in 1996 on "backbone" (or more major) circuits and continued this program through 2004. Tr. 1274. Enhanced tree trimming provides greater clearances than routine tree trimming and, in turn, produces fewer tree related outages and greater levels of reliability. AG-13. Goodfellow/Townsley Pre-Filed Testimony,

[18] The Attorney General also opposed CL&P's application to increase its rates by $210 million in that case.

17. Starting in 2012, CL&P has evaluated the circuits that are scheduled for routine tree trimming and have cut the poorer performing circuits to "enhanced" specifications. Tr. 1275-1276.

Despite these tree trimming programs, however, testimony submitted by the OCC in this case suggests that CL&P has reduced its annual distribution operations and maintenance expenses from $143.3 million in 2008 to $130.6 million in 2009, then to $109.2 million in 2010. Townsley/Coonan PFT, 7. PURA must ensure that CL&P is allocating sufficient funds to reliability spending.

Prior to the 2011 storms, UI trimmed trees on a four year cycle for three phase lines and on an eight year cycle for single phase lines, though the company did perform mid-cycle trimming as needed based on circuit performance. Tr. 2091; 2094. UI has apparently recognized that an eight year cycle for certain lines is too long and has since proposed a four year cycle for all of its distribution circuits. Tr. 2091. UI is also seeking PURA's guidance in this proceeding on expanding its clearance specifications and a proposed enhanced tree trimming program that could include "blue sky" clearance, or eliminating all tree branches above its distribution lines. Tr. 2092; 2100-2101.

AT&T and Verizon, the two other utility pole owners in the state besides CL&P and UI, do not engage in routine tree trimming or vegetation management and do not contribute toward the costs of such programs, despite the fact that they benefit AT&T, Verizon and the other companies that attach wires to utility poles. Tr. 1270-1271; OCC-31. See also Goodfellow/Townsley PFT, 14. Both CL&P and UI have inter-company operating procedures with AT&T whereby AT&T reimburses CL&P and UI for thirty percent of the storm-related tree damage costs. Tr. 1266-1267; 2096-2097. AT&T and Verizon are also responsible for fifty

percent of the costs associated with the removal of dangerous trees that threaten utility poles and lines, although AT&T has not generally paid its share of those costs, in part because CL&P has not sought to recover for such costs. Tr. 1269.

With regard to lineworker staffing, UI has increased its staffing levels since 2006, but CL&P's staffing levels have dropped since 2008. Townsley/Coonan Pre-Filed Testimony, 8, 18. Specifically from 2008 to 2010, UI has added three lineworkers while CL&P's staffing levels have dropped by 54. Goodfellow/Townsley Pre-Filed Testimony, Ex. TCG 3-2.

2. <u>The 2011 Storms</u>

Both Irene and the Nor'easter damaged or destroyed many utility poles. Following Irene, CL&P replaced 707 CL&P poles, AT&T replaced 585 of its poles, and repaired five jointly owned poles. AG-106. After the Nor'easter, CL&P replaced 856 of its poles, AT&T replaced 799 of its poles. AG-107.

Forty-six percent of CL&P's poles are over forty years old, compared with twenty-four percent of UI's poles. AG-22; Goodfellow/Townsley Pre-Filed Testimony, Ex. TCG 3-2. Poles over forty years old fail more frequently than poles under forty years old. Goodfellow/Townsley Pre-Filed Testimony, 30. Specifically, while twenty-four percent of UI's poles are over forty years old, fifty-six percent of UI's poles that failed were over forty years old. Similarly, while forty-one percent of AT&T's poles are over forty years old, sixty-two percent of AT&T's poles that failed were over forty. <u>Id.</u> CL&P was unable to identify the age of its poles that failed.

3. <u>Recommendations</u>

CL&P, UI, the OCC and a number of consultants in this proceeding have made many recommendations regarding changes in tree trimming and vegetation management policies in the state to improve service reliability. A lot of them make sense. Some of them sound extreme, at

least at first blush, such as UI's proposal to remove "all vegetation that is within 18 feet of the curb line and that could damage the distribution system during a storm such as those experienced in 2011." LF-18-1, 7 of 9; Tr. 2914-2915. All, however, require careful attention and consideration.

P.A. 12-148 requires, among other things, that PURA initiate a docket "to identify the most cost-effective level of tree trimming" and thoroughly review the tree trimming policies of each electric distribution company. P.A. 12-148, §§ 3(b), 3(c)(4) and 3(d)(7). P.A. 12-148 also requires that the Authority submit a report to the legislature by November 1, 2012 concerning its findings in that docket. Since PURA must set prospective tree trimming and vegetation management policies and practices in such a future proceeding, this brief only includes certain limited recommendations that the Authority may wish to consider and adopt in this case or in the future proceeding(s). The Attorney General may wish to include additional recommendations in future proceedings as he deems appropriate.

There seems to be little serious debate that CL&P and UI should trim trees on a four year cycle. See Liberty Report, 34; AG-18. PURA should also consider enhancing the tree trimming specifications for routine tree trimming as proposed by CL&P and improving the vine removal program. AG-17. PURA should also evaluate and formalize the enhanced tree trimming program to ensure that it provides maximum benefit for the reliability of the electrical system in the most cost effective manner. In doing so, however, PURA must remain mindful of the caution raised by OCC that enhanced tree trimming, if not done thoughtfully and carefully, does not inadvertently create more rather than less hazardous trees to threaten the power lines. See Goodfellow/Townsley Pre-Filed Testimony, 19-20. PURA should also review lineworker staffing, particularly at CL&P. Townsley/Coonan Pre-Filed Testimony, 19.

PURA should also take steps to consider and impose pole maintenance and inspections requirements, particularly with poles of an older vintage, such as over 30 years old. Such maintenance and inspections would likely become the responsibility of a pole administrator. See Section III.E., infra.

In addition, PURA should encourage CL&P and UI to coordinate their tree trimming efforts with municipalities. See Two Storm Report, 14. Municipalities can provide valuable assistance by helping educate their residents and reducing the number of objections that can prevent adequate trimming. Tr. 2111. CL&P and UI may also be able to reduce costs by coordinating tree trimming and removal efforts. Tr. 1277-1279; 2108-2109. Such coordination has proved to be very effective in Newtown and other places where it has been tried. Tr. 3053.

E. Pole Administrator

On December 14, 2011, PURA granted the motion of the OCC and Attorney General requesting that PURA take administrative notice of the record in Docket No. 11-03-07, DPUC Investigation Into the Appointment of a Third Party Statewide Utility Pole Administrator for the State of Connecticut (Docket No. 11-03-07"), and held that it would consider in this outage investigation "the issue of a third-party statewide utility pole administrator." PURA further stated that "[e]vidence developed herein may also be useful in the ultimate determination and outcome in Docket No. 11-03-07."

At least three parties submitted third-party utility pole administrator proposals in this case. In summary, the OCC suggested that PURA create a process for enhanced utility pole administration. Vallee Pre-Filed Testimony, 13; Tr. 2173. Such a process would include a single point of contact for utilities, municipalities and pole attachers and would set standards for nondiscriminatory access to poles as well as utility pole maintenance/replacement and provide

for the removal of double-poles. Vallee Pre-Filed Testimony, 14. As OCC made clear during the hearings in this proceeding, its proposal was intended as a "call to action" to address the many significant issues presented in our public rights of way. Tr. 2173.

Both CL&P and UI presented pole administrative proposals. CL&P offered to become the single pole administrator in the 149 municipalities that it serves. Bowes Pre-Filed Testimony, 1. Pursuant to this proposal, CL&P would be responsible for serving as the single point of contact for all pole related issues, serving as the single point of contact for all parties that seek to attach new equipment or replace existing equipment on poles, coordinate the shifting of equipment as necessary to eliminate double poles and facility repairs and replacement of equipment and new pole attachments, and accept responsibility when certain pole-related commitments are not met. Id., 3; Tr. 2277. CL&P opposed the idea that PURA should serve in this capacity but did not object to OCC's suggestion that PURA's mediation team continue to mediate pole-related disputes. Bowes Pre-Filed Testimony, 6.

UI's proposal went one step further. UI proposed to become the single pole owner and pole administrator in the 17 municipalities in its service territory. Thomas Pre-Filed Testimony, 2; Tr. 2279. As sole owner, UI would become responsible for installing new poles, inspecting and maintaining existing poles, shifting communications attachments, serving as the single point of contact for all pole related issues and would be responsible when pole-related commitments are not met. Thomas Pre-Filed Testimony, 4. UI also proposed to become responsible for all aspects of pole maintenance, including tree trimming. Tr. 2099. On the other hand, a number of parties, including AT&T, opposed the creation of a third-party pole administrator. They argued instead that PURA maintain the status quo. See, e.g., Rebuttal Testimony of Theresa Brown, 6.

PURA should, in this proceeding, endorse the concept of creating a third-party utility pole administrator and set forth the basic or minimum characteristics that should pertain to that position, such as single point of contact, responsibility for shifting equipment and perhaps inspection and maintenance duties and responsibilities. PURA should then establish a subsequent proceeding, perhaps in the pole administration docket, No. 11-03-07, to further define the structure establish clear parameters of the administrator's duties and responsibilities. In that subsequent proceeding, PURA should carefully evaluate the proposals submitted by CL&P and UI and consider any other proposals for a third party administrator or administrative process that may be presented. The status quo, without a single pole administrator, is dysfunctional system that should not continue.

V. IMPRUDENCE PENALTY

In the present case, PURA should make the predicate findings necessary to impose meaningful imprudence penalties on CL&P in a future ratemaking proceeding and should place CL&P on notice of the type and scale of penalties it intends to impose. As the PURA is no doubt aware, CL&P is committed to a distribution rate freeze until December 1, 2014, more than two years away. The Authority should therefore make clear in this proceeding the penalties it intends to impose when CL&P eventually files for rate adjustments in 2014 for two principal reasons. First, the Authority should make specific predicate findings of imprudence in this proceeding while the information is fresh. The Authority should not wait more than two years to revisit the issue of appropriate penalties after memories have faded and the future Authority may have different directors.[19]

Second, the PURA should put CL&P on notice of the seriousness of the Authority's commitment to force the utility to improve its management. As noted above in the Report of the

[19] Only one of the three authorized PURA directors has sat through the entire storm docket proceeding.

Two Storm Panel ("Two Storm Report"), "[t]he repetition of essentially the same problems identified after each storm over a 25 year period and similar recommendations is striking." Two Storm Report, 10. CL&P has a history of promising improvement, but then slipping back into laxity after the immediate uproar has passed. The Authority should keep the pressure on CL&P to make a sustained effort to improve its management before the next rate case two years down the road. Two years is a long time, and Connecticut may well see additional severe weather events during that time. Putting the Company on notice of the penalties PURA intends to impose should provide CL&P with strong incentives to improve its performance.

The Authority has imposed imprudence disallowances in a variety of forms over the years. In some cases, the DPUC found imprudent behavior and disallowed recovery of any specific costs that resulted from that imprudence. In Docket No. 08-02-06, DPUC Investigation Into the Connecticut Light and Power Company's Billing Issues, 10-11, the DPUC described those findings as follows:

> In determining the appropriate treatment of costs incurred by a public service company, the Department must consider whether the company's actions, which resulted in such costs, were prudent. In deciding whether the actions of a utility are prudent, the Department applies the "reasonable" person standard; that is, the standard of care a reasonable person would exercise under the same circumstances confronting the management of the utility at the time of the decision to take such actions. This standard was first articulated in the Department's July 21, 1988 Decision in Docket No. 87-11-01, Public Hearing to Investigate Whether Charges or Credits Made Under the Purchased Power, Fossil Fuel, Purchased Gas Adjustment and/or Generation Utilization Adjustment Clauses Are Accurate for the Preceding Three Months, in which the Authority set forth the following process as its policy for evaluating utility actions that may warrant cost disallowances.
>
> The proper analysis for determining any type of economic sanction such as a disallowance of recovery for imprudent or unreasonable actions on the part of a regulated utility occurs in several steps. First, there must be a clearly understood definition of the standard of care by which a utility's performance can be measured; second, the actions of the utility must be examined to determine if there has been a failure on its part to conform to the standard required; and finally, there must be a reasonably close casual connection between the imprudent conduct, if any, and actual loss or damage. Actions by regulated

> public utilities which are found to constitute imprudent management that result in increased costs are generally disallowed.

(Internal footnote omitted).

In other cases, the Authority has identified imprudent behavior and simply imposed penalties to both punish that behavior and provide incentives for improvement. For example, in Docket No. 08-12-06, Application of Connecticut Natural Gas Corporation for a Rate Increase, dated June 30, 2009, the Department of Public Utility Control ("DPUC"), PURA's predecessor agency, found that CNG did not properly include certain charges in its bills and that, as a result, some customers were billed too high while others were billed too low. Id., 95. The DPUC found that the company's management that oversaw billing and rates was imprudent and imposed a 10 basis point reduction to its return on equity ("ROE") as an imprudence penalty. The DPUC further noted in that case that such ROE adjustments are designed to ensure that rates reflect prudent and efficient management as required by Conn. Gen. Stat. § 16-19e(a)(5) and that such ROE adjustments have been upheld in other jurisdictions. Id., note 14.

Similarly, in Docket No. 10-09-08, Application of United Water Connecticut, Inc. to Amend Rate Schedules, dated April 27, 2011, the DPUC again imposed an ROE penalty for imprudent management. In that case, the DPUC found that the United Water Company's accounting, record keeping and billing methods were lacking and imposed a fifty basis point downward reduction to its ROE "as a penalty and strong warning to improve its business management practices." Id., 83. Importantly, the DPUC did not require in either of these recent cases any finding or showing that the company's imprudent actions caused actual losses or damages.

For the reasons discussed fully herein, the Authority should find that CL&P's preparation for and response to the 2011 storms were imprudent. Specifically, PURA should find in this case that CL&P was imprudent with regard to its:

-unreasonably inadequate preparation for major storms, including its failure to exercise or drill its emergency response plans and evaluate the results for at least five years prior to the 2011 storms;

-unreasonable failure to request the assistance of outside crews in a timely manner and reasonably manage the crews that eventually arrived in Connecticut;

-unreasonable damage assessment process, including its inability to transmit assessment information from the field to operations headquarters efficiently;

-unreasonable failure to train and support municipal liaisons and defer to local restoration priorities;

-unreasonable development of estimated restoration times; and

-unreasonable mismanagement of communications with the public and public officials concerning estimated restoration times.

First, PURA should specifically hold in this case that it will disallow the recovery by CL&P of any storm-related costs that are the result of the company's imprudent conduct, as required in Docket No. 08-02-06. For example, CL&P's unreasonable level of unpreparedness for major storms and its failure to respond to the 2011 storms in a reasonable and prudent manner likely caused the service restoration process to take longer than it otherwise would have. To the extent that this delay caused the company to incur costs, those costs should not be collected from ratepayers. PURA should defer the specific quantification of this amount until CL&P's next general ratemaking proceeding when the Company requests recovery of those costs.

Second, PURA should in this case make all of the necessary predicate findings to impose meaningful imprudence penalties and disallowances in future ratemaking proceedings. Specifically, PURA should disallow the recovery from ratepayers of a substantial portion, in the range of thirty to fifty percent, of CL&P's 2011 storm restoration and recovery costs. This penalty fairly reflects the cumulative effects of CL&P's imprudence in its preparations for and management of these storms. CL&P's imprudence, especially with respect to the Nor'easter, turned extended power outages into a crisis situations, caused significant public anxiety and severely impacted residents' and towns' abilities to effectively deal with the outages. PURA should defer the specific quantification of this amount until CL&P's next general ratemaking proceeding.

In the alternative to a complete percentage disallowance of recovery costs, PURA should reduce CL&P's ROE in a future ratemaking proceeding for the company's imprudent management, both as a penalty and as a strong warning to improve its management practices. Given the magnitude of the company's mismanagement of its storm preparation and response, the ROE penalty must be large enough to be meaningful and sufficient to reflect the full extent of CL&P's failures in the 2011 storms.

WHEREFORE, for the foregoing reasons, the Attorney General submits his brief in this proceeding.

Respectfully submitted,

GEORGE JEPSEN
ATTORNEY GENERAL

By: _____

Michael C. Wertheimer
John S. Wright
Assistant Attorneys General
10 Franklin Square
New Britain, CT 06051
Tel: 860-827-2620
Fax: 860-827-2893

Service is hereby
certified to all parties and intervenors
on this agency's service
list for this proceeding.

_____

Michael C. Wertheimer
Assistant Attorney General
10 Franklin Square
New Britain, CT 06051
Tel: 860-827-2620
Fax: 860-827-2893