

**PUBLIC UTILITY REGULATORY AUTHORITY
REVIEW OF THE PUBLIC SERVICE COMPANIES'
RESPONSE TO 2011 STORMS
DOCKET NO. 11-09-09**

**DIRECT TESTIMONY OF
THOMAS COONAN AND MICHAEL TOWNSLEY
ON BEHALF OF THE
OFFICE OF CONSUMER COUNSEL**

APRIL 5, 2012

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Thomas Coonan. I am a consultant affiliated with Townsley Consulting
3 Group, LLC. My business address is PO Box 423, Altamont, New York 12009.

4

5 My name is Michael Townsley. I am the Principal and sole owner of the Townsley
6 Consulting Group, LLC. My business address is 2 Fox Hill Road, Old Saybrook,
7 Connecticut 06475.

8

9 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND BUSINESS EXPERIENCE?**

10 A. **(Coonan)** In October 2011, I left the New York State Public Service Commission (PSC)
11 where, for the previous three years, I was Chief of the Gas Rates and Tariff Section in the
12 Office of Electric, Gas, and Water. My general responsibilities dealt with gas rate
13 proceedings, commodity reconciliations, franchise applications, generic proceedings, and
14 consumer complaints. I supervised an office of professional staff that provided expert
15 testimony on various rate proceedings. Prior to joining the Gas Rates and Tariff Section
16 in 1999, I worked for the Office of Utility Efficiency and Productivity where I performed
17 operational and management audits of electric, gas, water and telephone utilities. I began
18 my career with the PSC in October 1979 in the Office of Accounting and Finance where I
19 participated in numerous rate proceedings. I have worked on several cases involving the
20 introduction of retail electric and gas competition in New York State, been the project

1 manager for that state's review of the August 14, 2003 electric blackout that affected
2 much of New York State, and have been a PSC Staff lead on three major rate cases, a
3 merger case involving KeySpan Corporation and National Grid, and on a generic
4 proceeding involving manufactured gas plant remediation. I hold a Bachelor of Science
5 degree in Accounting from the State University of New York at Albany.

6 My resume is included as Exhibit __ (TCG – 2-1).

7
8 **(Townesley)** In 2011 I retired from the New York Department of Public Service (DPS) as
9 a Deputy Director. In my career at DPS I worked in the Offices of: Industry and
10 Governmental Relations, Energy Efficiency and the Environment, and Electricity and the
11 Environment.

12 During my work at DPS I provided oversight and guidance to Staff investigations such as:
13 extended power outages in Westchester County, New York; an assessment of failures and
14 the rebuilding of the Queens, New York, Long Island City (LIC) network following an
15 extensive power outage; and a management audit of Consolidated Edison Company of
16 New York, Inc.'s (Con Edison) electric emergency outage response program. I was also a
17 member of the DPS staff's LIC network outage prudence case settlement negotiations
18 team.

19
20 I have over 40 years of utility industry experience working in both the public and private
21 sectors serving in management and consulting roles. Areas of professional experience
22 include: strategic business and operational planning; power system facilities planning and

1 design; retail regulatory processes; deregulated (competitive) and regulated retail energy
2 markets; market planning; market management; financial and cost of service analysis; and
3 research & development portfolio planning and management. My professional experience
4 includes working in utility management positions within two large utility holding
5 company systems and working for an engineering and design consulting firm whose
6 clients were mainly utilities and industrial concerns with large electric demands. I have
7 testified before state public service commissions in Connecticut, Massachusetts, New
8 Hampshire, and New York and before state siting councils, legislative bodies, and other
9 state agencies.

10
11 My educational background includes a Master of Business Administration from
12 Rensselaer Polytechnic Institute and a Bachelor of Science Degree in Electrical
13 Engineering from Purdue University.

14
15 My resume is included as Exhibit __ (TCG – 2-1).

16
17 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

18 A. We are testifying on behalf of the Connecticut Office of Consumer Counsel (OCC), which
19 hired Townsley Consulting Group LLC (TCG) to assist in its review in Docket No. 11-09-
20 09, “PURA Investigation of Public Service Companies’ Response to 2011 Storms”.

1 **Q. PLEASE DESCRIBE THE SCOPE OF YOUR REVIEW.**

2 A. In this testimony we have examined potential performance-based ratemaking
3 methodologies for storm restoration conditions through examination of practices in other
4 retail rate jurisdictions that could potentially be applied in Connecticut. To gain some
5 insight on the asset management strategies of United Illuminating (UI) and the
6 Connecticut Light & Power Company (CL&P), we have examined trends over time for
7 transmission and distribution plant investment, operations and maintenance expenses and
8 Administrative and General (A&G) costs as compared to other utilities in the northeast
9 region. Additionally since the adequacy of the electric utilities' lineworker staffing levels
10 to support storm restoration has been raised in the post-event discussions regarding the
11 electric utilities' restoration performance for tropical storm Irene and the October
12 Nor'easter snow storm, we have examined lineworker staffing trends and the related
13 labor cost trends for UI and CL&P and made some comparisons of their labor costs with
14 the costs of other electric utilities in the northeast.

15
16 **Q. WHAT UTILITIES DID YOU INCLUDE IN THIS TREND ANALYSIS?**

17 A. We compared the costs for CL&P and UI with those of a set of utilities located in the
18 northeastern United States that are geographically close to Connecticut and which we
19 believe operate in conditions and situations that are similar to Connecticut. The utilities
20 that were included in the peer group are New York State Electric and Gas Corporation
21 (NYSEG); Rochester Gas and Electric Corporation (RG&E); Niagara Mohawk Power
22 Corporation d/b/a National Grid; Central Hudson Gas and Electric Company; Orange
23 and Rockland Utilities, Inc. (O&R); NStar; and Massachusetts Electric Company d/b/a

1 National Grid. Western Massachusetts Electric Company's (WMECO) costs were
2 tabulated but not included in the peer group because it is affiliated with CL&P.

3 Consolidated Edison of New York, Inc. (Con Edison), a New York utility, was also not
4 included in the peer group because its size dwarfs the other utilities and inclusion of such
5 costs would skew the peer group results.

6
7 **Q. PLEASE DESCRIBE THE TREND ANALYSIS YOU DID FOR TRANSMISSION**
8 **AND DISTRIBUTION PLANT INVESTMENT, OPERATIONS AND**
9 **MAINTENANCE EXPENSE, AND ADMINISTRATIVE AND GENERAL**
10 **EXPENSES?**

11 A. We performed a review to understand the allocation of available resources to support key
12 company functions. This review compared the utilities spending level changes between
13 2001 and 2010 using published FERC Form 1 data. The results of the analysis are shown
14 as Exhibit __ (TCG 2-2). Exhibit __TCG (2-3) shows the results of this analysis on a
15 cost per customer.

16
17 As shown in the Exhibit, we found that as far as plant investment is concerned, both
18 CL&P (369%) and UI (223%) increased their investment in transmission assets much
19 more than the peer group (45%) over this time period. Also, while both utilities (UI -
20 75%; CL&P - 69%) increased their distribution plant investment more than the peer
21 group (47%), the percentage increase in distribution plant was far less than the
22 investment increase in transmission plant. Transmission operation and maintenance
23 expenses for both companies (UI-181%; CL&P- 123%) also increased during this time

1 period much more so than the peer group (87%). UI's and CL&P's increases in
2 transmission costs are due largely on the increased emphasis in transmission plant
3 investments to reduce congestion costs and improve electric reliability. However, those
4 cost increases may have implications for other aspects of the utilities' budgets. During
5 the 2001 to 2010 time period, UI's increase in distribution operation and maintenance
6 expenses (52%) was slightly below the peer group (62%), but CL&P's was considerably
7 below it (6%). CL&P's increase in distribution operations and maintenance expense for
8 the period was also well below the rate of inflation for this same time period. Therefore,
9 CL&P's distribution and operations expense decreased in real terms from 2001 to 2010.
10 The only other utility that had a lower increase in distribution operations and
11 maintenance cost for the period was NSTAR at -2%. CL&P, WMECO and NSTAR are
12 clearly outliers with very low growth in distribution operations and maintenance
13 spending when compared to other utilities in region for the period 2001 to 2010. We
14 found that much of the cause for the low rate of increased spending since 2001 for CL&P
15 can be attributed to an actual decline in spending after 2008. The company reduced its
16 annual distribution operation and maintenance expenses from \$148.3 million in 2008 to
17 \$130.6 million in 2009. The company also reduced its distribution operation and
18 maintenance expense spending even further in 2010 to \$109.2 million (see Exhibit__TCG
19 2-4). Overhead line maintenance expenses have dropped from \$66.3 million in 2008 to
20 \$37.3 million in 2010, a 44% reduction.

21
22 We found that the aggregated A&G salaries for both UI and CL&P increased while the
23 peer utility group average declined through the same period. However, CL&P's increase

1 was 153% vs. -16% for the peer group. The comparatively low spending percentage
2 increases for CL&P's distribution operation and maintenance expenses stands in stark
3 contrast to the very substantial increase in aggregate A&G salary expense through the
4 period 2001 to 2010.

5
6 With regard to the cost per customer analysis shown on Exhibit___ (TCG 2-3) we found
7 that for aggregate A&G salaries in 2001, UI's cost per customer was \$93.01, versus
8 \$43.54 for CL&P and \$51 for the peer group. However, in 2010, UI's and CL&P's
9 aggregate A&G salary cost per customer increased to \$129.70 and \$105.16, respectively,
10 while the peer group cost per customer declined to \$43.51. In 2001, transmission
11 expenses per customer were \$92.68 for UI, versus \$32.18 for CL&P and \$74.42 for the
12 peer group. In 2010, UI's and CL&P's transmission cost per customer increased to
13 \$255.58 and \$68.44, respectively, while the peer group increased to \$140.95. For
14 distribution expense per customer in 2001, UI's cost per customer was \$88.01 versus
15 \$89.25 for CL&P and \$91.92 for the peer group. In 2010, however, while UI's and the
16 peer group's cost per customer had increased to \$131.69 and \$150.48, respectively,
17 CL&P's had increased only about \$1 to \$90.44 during the 9 year period.

18
19 **Q. WHAT CONCLUSIONS CAN YOU DRAW FROM THIS ANALYSIS AND**
20 **WHAT IS YOUR RECOMMENDATION?**

21 A. During the period from 2001 to 2010, the Connecticut electric utilities'
22 transmission and distribution plant investment, transmission O&M, and A&G salaries
23 have increased at rates greater than those of the peer group. The percentage increase in

1 A&G salary expense for CL&P and its affiliate the Western Massachusetts Electric
2 Company (WMECO) were among the highest percentage increases observed among the
3 utilities observed and several orders of magnitude higher than the peer group average.

4
5 The very low percentage change in distribution operating and maintenance expenses for
6 CL&P over the period observed is a concern, particularly the steep declines in the last
7 few years. In addition, although PURA directed some significant reductions in the
8 overall operations and maintenance expenses proposed by CL&P in their most recent rate
9 case, we found no evidence that the recent reductions implemented by CL&P in
10 distribution overhead line maintenance expense were specifically directed by PURA.

11
12 Given the importance of distribution system maintenance to the reliability and the
13 resilience of the distribution system, and the age of some portions of the electric utilities'
14 distribution plant, we recommend that PURA require more frequent reporting of
15 operation and maintenance expenses from CL&P and UI. We recommend such reports
16 should be made on a timely periodic basis to assist PURA and other interested parties in
17 closely monitoring the utilities' distribution operations and maintenance spending
18 patterns between rate case reviews.

19
20 Because the rate of expense growth in non-line maintenance accounts can potentially put
21 pressure on the resources available for line maintenance, we also recommend that PURA
22 initiate a review of both UI and CL&P's Administrative and General (A&G) salaries
23 expense. The significant increase in CL&P's A&G Salaries since 2001 compared to the

1 peer group and the overall higher than peer group A&G Salaries cost per customer for
2 both CL&P and UI warrant a further review to determine if these are reasonable and if
3 the magnitude and growth of these costs are potentially limiting the resources available
4 for line maintenance.

5
6 **Q. WHAT IS THE IMPORTANCE OF LOOKING AT LINEWORK STAFFING**
7 **PRACTICES OF UI AND CL&P?**

8 A. The period of time immediately after the passage of a severe storm is very critical time as
9 state and local governments are taxed with reaching and assisting citizens and property
10 that may need immediate assistance. Often such storm events will leave roadways
11 blocked from fallen debris including utility infrastructure that can pose hazards to first
12 responders, which can only be addressed by properly trained and equipped utility
13 lineworkers. For the initial period following a storm event until mutual aid and foreign
14 contract crews can travel to the damage areas, utilities must rely mainly on their in-house
15 lineworker staff to assist towns in clearing roadways and to respond to high priority 911
16 calls. These in-house lineworkers also handle a major portion of routine maintenance of
17 the electrical distribution system to maintain and sustain its resilience to storm related
18 damage.

19
20 **Q. PLEASE DESCRIBE YOUR REVIEW OF LINEWORKER STAFFING LEVELS**
21 **AND TRENDS AT UI AND CL&P.**

22 A. We examined cost information associated with CL&P and UI's (collectively referred to
23 here as the companies) distribution-related labor and compared those costs with those of

1 the other peer utilities identified above. We also reviewed hiring and retirement trends
2 for line workers and the status of the companies' training programs, focusing on what
3 CL&P and UI are planning to do given the potential for significant line worker
4 retirements in the next five years and on any lessons learned and changes made to
5 staffing levels as a result of Storm Irene and the October Nor'easter (the storms).

6
7 We attempted to compare actual lineworker staffing levels of other companies with those
8 of CL&P and UI. However, we were unable to find data for such a comparison. Instead,
9 as a surrogate for staffing levels, we used FERC Form One data which includes labor
10 costs by broad categories, such as transmission and distribution. For the purposes of this
11 review, we focused on distribution operations and maintenance labor since it appears that
12 the lineworkers' responsibilities would most likely be associated with operating and
13 maintaining the distribution system. It is this distribution plant which had most of the
14 damage from the two storms. OCC has issued Interrogatory 379 to CL&P which may be
15 useful for making staffing level comparisons among companies; however, that response
16 remains outstanding at the present time.

17
18 **Q. WHAT IS THE RESULT OF YOUR COST COMPARISON REVIEW?**

19 A. As shown in Exhibit __ (TCG 2-5), for 2006, UI's distribution labor cost/customer
20 (\$74.53/customer) was slightly higher than that of CL&P (\$61.44) and that of the peer
21 group (\$64.08). For 2010, however, UI's distribution labor cost/customer (\$82.86) was
22 significantly higher than CL&P's (\$62.34) and the peer group (\$67.23). Overall, this
23 indicates that UI has experienced a steady growth in lineworker-related labor costs for the

1 period 2006 to 2010, whereas both CL&P and the peer group have shown very modest
2 per customer increases.

3
4 **Q. DID YOU ALSO EXAMINE OTHER RELATED LABOR METRIC TRENDS**
5 **FOR UI AND CL&P OVER TIME?**

6 A. Yes. Exhibit __ (TCG 2-5) also shows aggregate labor cost comparisons between these
7 two utilities by year from 2006 to 2010. This exhibit reveals that UI's distribution labor
8 costs increased 12% between 2006 and 2010 while CL&P's distribution labor costs
9 increased 3% between 2006 and 2010. The peer group's distribution labor costs
10 decreased 2% between 2006 and 2010. Over the region in aggregate it appears that
11 utilities' distribution labor costs have remained relative flat over the period. However,
12 UI's increases in aggregate distribution labor costs tended to be in a higher tier among its
13 peers perhaps because UI has maintained the overall level of its line workforce rather than
14 allowing that workforce level to decline.

15
16 Exhibit __ (TCG 2-6) shows lineworker staffing levels for these same years. As to the
17 number of lineworkers, UI's lineworker count has increased from 89 in 2006 to 99 as of
18 June 2011, while CL&P's has decreased from 744 in 2006 to 704 as of June 2011 (see
19 response to Interrogatory OCC-184). CL&P's lineworker count reached 774 in 2008.
20 However, in contrast to UI's staffing levels, CL&P's lineworker staffing level has
21 dropped nearly 10% since 2008 while UI's slightly increased. It should be noted that
22 while UI defines lineworker to be an overhead lineworker, CL&P defines lineworker to

1 include line mechanics, troubleshooters, cable splicers, electricians, streetlight
2 mechanics, and line force ground workers.

3
4 **Q. DID YOU EXAMINE CL&P'S LINEWORKER STAFFING LEVEL**
5 **COMPLIANCE REPORTS, ESTABLISHED AS PART OF DOCKET 03-07-02?**

6 A. Yes. In Docket 03-07-02, PURA required CL&P to report annually its line worker and
7 other attrition title staffing levels, including hires, retirements, and terminations. The last
8 compliance report in that docket was for the year ended December 31, 2007. In this
9 docket, those reports were updated (see response to Interrogatory OCC-213).

10
11 Exhibit ____ (TCG 2-7) shows the history of hiring, retirements, and terminations for
12 CL&P's attrition titles. As can be seen in the Exhibit, staffing levels for these job titles
13 increased from December 2003 to December 2008, but has declined since then. It should
14 be noted that the job titles reported in Docket No. 03-07-02 compliance filings are
15 different than the line worker definitions provided by CL&P in the current docket.
16 Docket No. 03-07-02 compliance reports included New Service Technicians, Electric
17 Service Designers, and Test Technicians employees within the attrition job titles, whereas
18 CL&P's filings in this docket does not include those employee types within the definition
19 of lineworker (see response to Interrogatory OCC-347).

20
21 Since 2008, for CL&P, the in-house attrition job title staffing count is down by 82, or
22 slightly less than 10%. The line mechanic position level is down by 54 since 2008, or
23 about 11% (see response to Interrogatory OCC-213). As described in more detail, an

1 issue to be further clarified is whether or not contract lineworkers have been used to a
2 greater degree to compensate for the in-house lineworker attrition.

3
4 **Q. GIVEN THE TRENDS IN LINEWORKER STAFFING LEVELS,**
5 **PARTICULARLY FOR CL&P, DID YOU EXAMINE RETIREMENT**
6 **PROJECTIONS?**

7 A. Yes. We asked the companies about potential retirements of lineworkers. UI and CL&P
8 stated that for 2012, 16% and 17% of their lineworkers, respectively, would be eligible to
9 retire (see response to Interrogatory OCC-179). By 2016, 24% (UI) and 34% (CL&P) of
10 their lineworkers, respectively, would be eligible to retire. Specifically, for CL&P's line
11 mechanic title, 89 employees (16%) would be eligible to retire in 2012 and 146 (32%) by
12 2016.

13
14 Given the number of lineworkers that are eligible to retire, the companies were asked to
15 describe what they planned to do to replace these employees (Interrogatory OCC-172).
16 CL&P stated that it evaluates lineworker staffing levels on an ongoing basis and includes
17 the need for both CL&P and contract lineworker resources. It noted that it recently
18 increased the number of contractor lineworkers. When questioned about this recent
19 decision to increase the number of contractor lineworkers (Interrogatory OCC-341),
20 CL&P stated that it used contract labor for backlogged customer work, deferred line
21 projects, and post-storm cleanup since the need was immediate. It believed that this
22 work was short term in duration and that it could not ramp up in-house workers

1 quickly. As to future needs, it stated that it will replace retiring lineworkers with fully
2 qualified lineworkers to maintain the existing staffing levels in accordance with the latest
3 PURA rate decision. CL&P could not provide an estimate of the number and type of
4 lineworkers (in-house vs. contractor) it would obtain over the next 10 years (see response
5 to Interrogatory OCC-341).

6
7 UI plans to conduct line schools in 2012, 2014, and 2016, expecting that each line school
8 will produce approximately 10 new lineworkers to replace projected attrition. UI will
9 also hire experienced lineworkers whenever they are available. UI stated that it maintains
10 a posting on its internet site for experienced lineworkers and on EnergyCentral.com(see
11 response to Interrogatory OCC-349).

12
13 **Q. HOW HAVE THE UTILITIES DETERMINED PROPER IN-HOUSE**
14 **LINEWORKER STAFFING LEVELS?**

15 A. CL&P stated that for its transmission group it reviewed staffing levels in 2010 and
16 determined that the levels were sufficient but that for the future it was determined that up
17 to 3 annual full time equivalents (FTEs) would not be replaced if attrition occurred.
18 CL&P stated that for its distribution organization, the issue of proper staffing levels was
19 evaluated by PURA in Docket No. 07-06-63 and that PURA concluded that linemen
20 staffing levels were adequate. It stated, however, that due to the storms, it is re-
21 evaluating linemen staffing levels (see response to Interrogatory OCC-181).

22

1 UI stated that it does not have a documented analysis or study to determine appropriate
2 electric lineworker staffing levels. It said that it projected before the storms that it would
3 need to gradually increase the number of lineworkers from the current level of 100 to 111
4 after completion of the 2016 line school (see response to Interrogatory OCC- 181).

5
6 **Q. DID YOU EXAMINE THE USE OF CONTRACTORS VERSUS IN-HOUSE**
7 **LINEWORKERS?**

8 A. To provide a more complete picture of lineworker staffing trends and the companies'
9 approaches to use of in-house versus contractor labor, OCC requested historic in-house
10 lineworker overtime hours and contractor hours from both UI and CL&P. UI provided
11 information going back several years for overtime hours and contractor hours.
12 Unfortunately, CL&P was not able to fully answer the question regarding contractor
13 hours. CL&P indicated that the data for contractor hours prior to 2009 was unavailable
14 and that information subsequent to mid-2009 did not include all contractors (see response
15 to Interrogatory OCC-185). Therefore, we could not ascertain if CL&P's use of
16 contractors in recent years has offset the decline in lineworkers.

17
18 **Q. WHAT IS THE CURRENT STATUS OF THE LINEWORKER**
19 **APPRENTICESHIP PROGRAMS?**

20 A. Both CL&P and UI conduct apprentice programs for newly hired lineworkers. CL&P's
21 program takes four years while UI's takes five years to train a new employee to be a fully
22 qualified lineworker (see responses to Interrogatories OCC-173, 174).

1 Both companies also described the status of employees in this program. UI has 23
2 employees in the apprenticeship program whereas CL&P has 26 employees. This
3 number of employees in the apprenticeship program equates to 23% of UI's lineworkers
4 and 6% of CL&P's lineworkers. The companies have had several lineworkers leave the
5 apprentice program before completion (see response to Interrogatory OCC-178). UI
6 believes that some candidates quit soon after starting line school because they realized
7 that the lineworker work requirements are of little interest to them or that they would not
8 be proficient at those work duties (e.g. climbing poles). In recent years, the company
9 reports that it has provided a detailed orientation to candidates, which has decreased the
10 attrition rate. A mid-week evaluation is also provided to identify apprentice issues and to
11 offer extra training (see response to Interrogatory OCC-350). CL&P has lost 21
12 "helpers" in the last five years. CL&P, however, did not describe the efforts taken to
13 reduce attrition in the apprentice program (see response to Interrogatory OCC-340).

14
15 **Q. WHAT CORRECTIVE ACTIONS HAVE BEEN MADE OR PLANNED BY THE**
16 **COMPANIES IN THE AREA OF STAFFING AS A RESULT OF THE STORMS?**

17 A. CL&P has stated that it has brought in approximately 50 additional contract line crews to
18 support its existing CL&P line crews. According to CL&P, these crews are available for
19 immediate deployment in the event of a storm. The company also increased the number
20 of contract tree crews to support future efforts. CL&P noted that it was looking into
21 increasing the use of contract patrollers to assist CL&P personnel during the storms and
22 will increase that capability for the future (see response to Interrogatory OCC-176, EL-
23 033).

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UI stated that it has expanded its relationship with its field survey contractor, restructured contract agreements with line clearance contractors to provide additional crews, and is evaluating the use of additional electrical contractors. It is also researching the use of retirees as damage assessors (see response to Interrogatory OCC-176).

Neither utility concluded that in-house lineworker staffing levels need to be increased as a result of their lessons learned from the storms.

Q. PLEASE PROVIDE YOUR OVERALL CONCLUSIONS AND RECOMMENDATIONS ON LINEWORKER STAFFING.

A. CL&P lineworker staffing levels have declined since the 2008 rate review. The company’s reliance on a PURA decision in 2008 (Docket No. 07-06-63) to justify its current in-house staffing level is possibly misplaced since staffing levels have declined by close to 10% from the date of that PURA decision. The attrition of CL&P lineworkers since 2008 is a potential concern in light of the large number of lineworkers that will be eligible to retire in five years or less, and coupled with the relatively low number of apprentices ready to become fully qualified lineworkers.

UI has maintained a steadily increasing lineworker staffing level. Therefore, its ability to deploy in-house lineworker resources immediately after a storm event has not diminished over time. CL&P however has allowed attrition in its workforce in recent years and is facing increased retirements in the near future. Furthermore, CL&P was not clear in

1 discovery answers regarding its plans to address this issue. Therefore, CL&P may have
2 diminished its capacity to respond to storms using its in-house lineworker staff resources.
3 The distribution labor cost trends of the utility peer group seems to indicate that the
4 percentage change in distribution labor expense for the utility comparison group for the
5 period 2006 to 2010 has been -2%. Therefore, it is likely that there is a declining level of
6 utility in-house lineworkers available in the region able to assist in response to storm
7 events.

8
9 We recommend that PURA conduct a review of CL&P's lineworker staffing levels to
10 determine why its in-house lineworker staffing levels have declined from the 2008 level
11 and if the continued decline in staffing levels for lineworkers are in the best interest of
12 customers in emergency restoration events. We also recommend that PURA require UI
13 and CL&P to periodically provide a five-year forecast for lineworker staffing levels
14 which include both in-house and contractor line resources to enable PURA and other
15 interested stakeholders to understand how the utilities intend to manage lineworker
16 staffing levels going forward as the potential for in house lineworker retirements
17 increases.

18
19 **Q. WHAT IS YOUR RECOMMENDATION CONCERNING THE DOCKET NO. 03-**
20 **07-02 COMPLIANCE REPORTS?**

21 A. We recommend that PURA should reinstitute for CL&P the annual reporting requirement
22 for lineworker attrition that was in effect prior to 2008. CL&P should also report to
23 PURA annually on the use of contract line workers and the associated contract labor

1 hours expended in a format similar to that required in Docket No. 03-07-02. PURA
2 should also require UI to provide this type of compliance reports. This information
3 should permit PURA and other interested parties to have more complete and timely
4 knowledge of in-house and contractor staffing levels at the companies.

5
6 We also recommend that PURA direct CL&P and UI to conduct periodic studies and
7 related analyses to help it determine and justify whether their levels of in-house and
8 contract lineworkers are sufficient to provide reliable service and respond to severe
9 storms.

10
11 **Q. WHAT IS YOUR RECOMMENDATION CONCERNING THE**
12 **APPRENTICESHIP TRAINING PROGRAMS?**

13 A. We recommend that PURA direct CL&P and UI to report annually on their efforts to
14 recruit and train new lineworkers and the attrition rates for trainees over time. As we
15 mentioned above, the apprentice program is a valuable program to prepare new
16 employees to carry out line responsibilities, particularly in light of the number of
17 lineworkers eligible for retirement in the next five years.

18
19 **Q. PLEASE DESCRIBE YOUR EVALUATION OF PERFORMANCE-BASED**
20 **REGULATION METHODS FOR SEVERE STORMS.**

21 A. Based on the impact of both Tropical Storm Irene and the October Nor'easter, there is an
22 interest in potential performance based regulation methods applicable to severe storm
23 restoration. As indicated by the Two Storm Panel in its *Report of the Two Storm Panel*,

1 dated January 9, 2012, it appears that the State of Connecticut, including PURA, does not
2 currently have regulations or quality of service standards applicable to storm preparation
3 and restoration. It is, however, our understanding that the Connecticut legislature is
4 considering legislation that would require PURA to create such standards including the
5 imposition of penalties. To better understand the various policy approaches currently in
6 use throughout the nation to address utility reliability and storm restoration performance,
7 we issued a survey to several state regulatory commissions. Based on the survey results,
8 a review of the Massachusetts legislation and regulations, and other analyses, some
9 potential best practices have emerged.

10
11 **Q. WHAT AREAS DID THE SURVEY COVER?**

12 A. The survey asked about state regulatory policies concerning investigations of electric
13 utility performance associated with severe storms, the ability by the state regulatory
14 agency to penalize the utility for poor restoration performance, the regulatory oversight
15 over utility emergency response plans used for storms, credits for customers that have
16 experienced outages, and the recovery of storm restoration costs.

17
18 We sent the surveys to the following states: Massachusetts, Washington, Oregon, Idaho,
19 Pennsylvania, Ohio, California, Louisiana, Utah, Florida, Arkansas, and Michigan. Not
20 all of the survey recipients responded to the survey. The survey responses are
21 summarized in Exhibit __ (TCG 2-8).

1 The Exhibit also includes relevant available information for Connecticut, New York, and
2 Great Britain. We also discuss the recent Massachusetts legislation and regulations
3 concerning emergency response.

4
5 **Q. CAN THE STATES SURVEYED PENALIZE A UTILITY FOR POOR**
6 **RESTORATION PERFORMANCE?**

7 A. Yes, the states surveyed have a number of regulatory options available to them associated
8 with poor storm restoration activities. Storm restoration costs are generally reviewed for
9 prudence of expenditures and the utility's restoration performance, and are subject to
10 disallowance. Some states indicated that return on equity in rate cases can be lowered. A
11 few jurisdictions give credits to customers that are out of service beyond a certain time
12 period. Massachusetts was the only jurisdiction surveyed that has a penalty mechanism
13 tied in with failure of the utilities to abide by their emergency restoration plans.
14 Massachusetts can also deny storm restoration costs if the utilities failure to follow its
15 Emergency Restoration Plan (ERP) during a storm restoration effort and extended the
16 time period to fully restore service. California considered standards that would permit it
17 to penalize utilities for failing to restore service within a specified period of time, but
18 chose not to adopt those standards. California will consider the utility's restoration
19 performance reasonable if the CAIDI is below 570, and unreasonable if higher than that.
20 We were unable to determine what regulatory measures are enacted if the CAIDI exceeds
21 570. Several state regulatory agencies have approved company-provided compensation
22 or credits for customers; however, this appears to have been the result of settlements

1 rather than explicit compliance with a law or regulation. Credits have gone to customers
2 in New York, Michigan, Utah, and Washington.

3
4 **Q. ARE THE ELECTRIC UTILITIES SURVEYED REQUIRED TO HAVE AN**
5 **EMERGENCY RESPONSE PLAN AND TO FILE THAT WITH THE STATE**
6 **REGULATORY AGENCY?**

7
8 A. The results of the survey and review of New York and Connecticut material showed a
9 significant range in the specific requirements and the approval of emergency response
10 plans (ERP). The Massachusetts DPU requires an annual filing of an ERP and is
11 responsible for approving the plan. They also hold electric utilities accountable for
12 following the ERP or they face a penalty. Some state regulatory agencies require only a
13 certification that the utility has a plan. Other than Massachusetts, none of the surveyed
14 states have any penalty mechanisms associated with the failure of a utility to abide by its
15 ERP.

16
17 **Q. WHAT DID YOU DISCOVER REGARDING PAYMENTS TO CUSTOMERS**
18 **FOR STORM-RELATED ECONOMIC LOSSES?**

19
20 A. Several states indicated that there is no requirement to compensate customers for
21 economic losses and any payments to customers that have occurred have resulted from
22 settlements or done voluntarily on the part of the utility. Con Edison is the only utility in
23 the states examined that has a tariff provision requiring payments to customers for

1 perishables under certain circumstances. Any payments to customers under this tariff
2 provision are capped and the utility is permitted to recover these costs in their revenue
3 requirement. Great Britain has a system that provides payments to customers if service is
4 not restored within specific time periods. These standards apply to routine and severe
5 storm conditions and the amount paid to a customer varies depending on the severity of
6 the storm and the length of time that the customer is out of service. It is our
7 understanding that in Great Britain, the shareholders of the distribution company pay for
8 the customer payment and cannot recover those payments from other customers.

9
10 **Q. DO ALL OF THE UTILITIES SURVEYED HAVE ELECTRIC RELIABILITY**
11 **STANDARDS?**

12
13 A. Yes, practically all of the states surveyed have electric reliability standards. However,
14 these standards generally exclude performance during significant storms.

15
16 **Q. PLEASE SUMMARIZE THE METHODS USED BY THE REGULATORY**
17 **COMMISSIONS TO TREAT RESTORATION COSTS.**

18
19 A. All of the state regulatory bodies responding to the survey have methodologies to
20 compensate the utility for prudently spent storm restoration costs. Generally, the utilities
21 are allowed to set up storm reserves or defer storm restoration costs, and recover
22 prudently spent storm restoration costs either as part of a rate proceeding or a prudency
23 review.

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Q. PLEASE PROVIDE YOUR CONCLUSIONS AND RECOMMENDATIONS ON STORM RESTORATION PERFORMANCE BASED RATEMAKING.

A. A review of the Massachusetts Laws/regulations, survey results, and other state information has assisted the review of potential storm restoration ratemaking proposals for Connecticut. The following proposals should be considered:

Storm Investigation Thresholds – We recommend that PURA conduct an investigation of a utility’s performance in planning for, and restoring service from, a severe storm based on certain event criteria. PURA could set a minimum number of customers out of service for a minimum duration of 3 days as a benchmark that would mandate an investigation of a utility’s restoration actions. PURA, however, should have the flexibility to investigate smaller scale outages as may be appropriate based on the nature of the circumstances. Interested parties should be permitted to participate in all of such proceedings.

Standards of Performance/Emergency Response Plans – We recommend that PURA develop standards for acceptable performance for storm preparation and restoration and using an Emergency Response Plan template approach similar to the process used by Massachusetts. The Massachusetts framework, which holds the utilities accountable for following DPU standards and emergency response plans but does not set explicit restoration time standards, appears to be a reasonable model for this. Exhibit__(TCG 2-9) contains some attributes of the Massachusetts Regulations and Emergency Response

1 Plan guidelines. Regardless of the regulatory model chosen, there will continue to be a
2 need to perform a detailed post-storm analysis.

3
4 The review of other state programs indicated that there are few regulatory mechanisms
5 designed to require utilities to restore service to customers in severe storms within
6 specific time periods. It is noteworthy that California apparently attempted to set such
7 restoration time standards for severe storms but decided not to establish this basis. There
8 does not appear to be a sufficient amount of information available that would permit the
9 establishment, at this point, of meaningful restoration time standards. Every utility
10 service territory is different as are the attributes of major storm events. Moreover, any
11 available data on severe storm restoration times will be influenced by the characteristics
12 of each utility's restoration effort, good or bad. We recommend, however, that PURA
13 require the Connecticut utilities to develop and maintain a database of their past and
14 future storm restoration experience for potential future use. If this type of data could be
15 collected and stored nationally, perhaps through NARUC, such data could inform the
16 establishment of a more precise criterion.

17
18 We recommend that PURA direct each utility to develop a Connecticut-specific
19 Emergency Response Plan, consistent with the standards developed, and file the ERP at
20 least bi-annually. We would recommend that such plans should be subject to specific
21 review and approval by PURA in a docket, and that such plans be used to determine the
22 utilities' compliance for future storm events. The utilities should be held accountable to
23 follow these ERPs during restoration events for severe storms and be subject to penalties

1 as in Massachusetts, whether under the current statutory paradigm or under newly
2 enacted legislation specific to storm restoration performance standards.

3
4 At a minimum, given the level of frustration expressed by Connecticut's towns and cities
5 in the two subject storm events, we would recommend the ERPs include a description of
6 the procedures by which the utility estimates the full restoration time for towns and cities
7 in the affected areas and the protocols for communicating those estimates to the public
8 and government officials. The utilities' ERPs should be explicit as to the communication
9 protocols to be used with Towns, the State EOC, and other utilities to establish
10 restoration priorities. The utilities' ERPs should be completely consistent with the
11 National Incident Command System protocols used by the Federal Emergency
12 Management Authority (FEMA). In addition, CL&P's ERP should describe how it will
13 coordinate emergency response on a regional basis.

14
15
16 ***Penalties/revenue adjustments*** – We recommend that PURA use any existing authority
17 to levy shareholder penalties or revenue adjustments on utilities and use its authority to
18 deny the recovery of storm restoration costs if it is found that: a) the utility took longer
19 than it should have to restore service, b) failed to follow its emergency response plan, c)
20 incurred greater restoration costs than it should have, or d) managed and/or maintained its
21 distribution and transmission system in such a way that management resource allocations
22 contributed to the outage and/or exacerbated the level of damage from the storms. While
23 OCC believes that PURA already has this authority (a legal issue which OCC will cover

1 in its brief in this matter), new legislation specifying PURA's authority in this regard
2 would send a clear message that this authority is expected to be exercised. Any
3 penalties/revenue adjustments that go beyond denial of storm restoration costs or reduced
4 return on equity that may be assessed to utility shareholders should be deferred for
5 customer benefit. If PURA is given the authority to assess to shareholders penalties
6 beyond that available to it now, the penalties adopted in Massachusetts appear to be a
7 good starting point for Connecticut's consideration. We would further recommend that
8 PURA be given wide latitude in determining how to best distribute any penalty revenues
9 generated among ratepayers, as there may be reasons to vary the approach based on
10 particular circumstances of an event or other externalities that may need to be given
11 weight in making such determinations. How such penalty revenues should be treated
12 could be an issue to be determined in such a proceeding and may be a settlement matter
13 among the parties to the proceeding.

14
15 *Performance-based employee compensation* – We recommend that PURA require that
16 the topic of storm preparation and restoration be included as a separate element in utility
17 incentive compensation plans that are supported by utility ratepayers.

18
19 **Q. PLEASE PROVIDE A SUMMARY OF ALL OF THE RECOMMENDATIONS**
20 **MADE IN THIS TESTIMONY.**

21 A. Below is a summary of the recommendations presented in this testimony.

22 1. Transmission & Distribution Plant and Operations and Maintenance Expenses, A&G
23 Salaries and Expenses (see pages 6 through 10):

- 1 a. PURA should require more frequent reporting of distribution operating and
2 maintenance expenses from CL&P and UI.
- 3 b. PURA should review the Administrative and General Salaries of both UI and
4 CL&P.
- 5 2. Lineworker Staffing Levels (see pages 10 through 20):
- 6 a. PURA should conduct a review of why CL&P's lineworker staffing levels have
7 declined in recent years and why these reduced levels are in the best interest of
8 customers in emergency restoration events.
- 9 b. PURA should require CL&P and UI to file five year forecasts of lineworker
10 staffing levels, both in-house and contractor.
- 11 c. PURA should direct CL&P to continue filing lineworker attrition reports required
12 under Docket 03-07-02. PURA should also require UI to file these reports.
- 13 d. PURA should require CL&P and UI to conduct periodic studies and analyses
14 regarding proper in-house and contract lineworkers.
- 15 e. PURA should require CL&P and UI to report annually on their efforts to recruit
16 and train new lineworkers.
- 17 3. Performance-based Ratemaking (see pages 20 through 28):
- 18 a. PURA should develop standards for acceptable performance for storm preparation
19 and restoration, including the development of a standard Emergency Response
20 Plan.
- 21 b. PURA should require the utilities to develop and maintain a database of their past
22 and future storm restoration experiences.

1 c. PURA should require the utilities to develop Connecticut-specific emergency
2 response plans consistent with the standards developed and to file these plans at
3 least bi-annually. The filed plans should be subject to PURA review and
4 approval. Utilities should be subject to additional penalties for failure to abide by
5 these emergency restoration plans during storm events.

6 d. PURA should require the utilities to include the topic of storm restoration in
7 employee incentive compensation plans that are supported by ratepayer funds.

8

9 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

10 A. Yes, it does.

11