

MORELAND COMMISSION

ON UTILITY STORM PREPARATION AND RESPONSE



FINAL REPORT

June 22, 2013

Co-Chairs

Robert Abrams

Benjamin Lawsky

Appointed by

Governor Andrew M. Cuomo

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STATE OF NEW YORK



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Moreland Commission
Appointed by
Governor Andrew M. Cuomo

Executive Director
Regina Calcaterra

June 22, 2013

Honorable Andrew M. Cuomo
Governor of the State of New York
State Capitol
Albany, New York 12224

Dear Governor Cuomo:

The Moreland Commission on Utility Storm Preparation and Response, co-chaired by Robert Abrams and Benjamin Lawsky, is pleased to present you with this Final Report.

As discussed in our Interim Report, the unprecedented 2012 landfall of Hurricane Sandy illustrated that utilities are woefully unprepared to manage the growing threat posed to New York State by catastrophic storms. At Hurricane Sandy's peak, electric service to 2.2 million New York customers was lost, with many left in the dark for weeks after. Measuring at nearly 1,000 miles across, Sandy left New York after causing 53 deaths, and was one of the most costly hurricanes recorded in the nation's history. New York State also encountered several severe storms through 2011, namely the 2008 Ice Storm, as well as Hurricane Irene and Tropical Storm Lee. Combined, these earlier storms caused over 1.5 million power outages across the State and presented hazardous flooding and icing conditions. As a result of Irene and Lee, the Governor declared a state of emergency in 38 of New York's 62 counties. These weather events demonstrated several deficiencies within our utility system, including a systemically poor coordination of restoration efforts.

In light of the magnitude of these storms, as well as their impact on the essential services provided to New Yorkers, the Commission engaged in a comprehensive investigation of the practices of the State's utilities. As a result, we recommend a series of critical alterations to the State's public policy and the internal policies of New York's utilities. With another hurricane season upon us, we believe the State and utilities must act to build a stronger, more prepared New York.

The Final Report continues the investigation of the Long Island Power Authority (LIPA) by picking up on the investigation initiated by the Office of the New York State Inspector General (IG), ordered by you in April 2011, which uncovered issues not previously reviewed. The new issues identified appear to be only a sampling of LIPA's structural dysfunction and blatant disrespect for ratepayers. Furthermore, the Commission believes that some of the issues warrant further investigation by a prosecutor. Ultimately, the Commission concludes that LIPA's bifurcated management structure fails to work not only during weather emergencies, but also during "blue sky" conditions, reinforcing the Commission's initial conclusion that LIPA, in its current state, should no longer exist.

The Commission's Policy Subcommittee, chaired by former New York State Public Service Commission (PSC) Chairman Peter Bradford, continued its examination of State energy efficiency programs. The Commission now addresses the issue of utility storm hardening and the dire need for investment in the State's utility infrastructure, including recommendations on how best to fund such investments. The Commission then analyzes the *ex parte* rule exemption applied to Public Service Commissioners, which allows the utilities unfettered access to the decision-makers without disclosure. We conclude that the absence of such a rule is one of many examples how PSC proceedings are weighted against customer interest. To redress the balance, the Commission recommends creation of a ratepayer advocacy entity.

The Commission's Investigation Subcommittee, chaired by Nassau County District Attorney Kathleen Rice, expanded its investigation of LIPA as described above and, as directed in Executive Order 73, investigated the State's six investor owned utilities' storm preparation and response. This Final Report identifies perceived deficiencies in the utilities' storm preparation and restoration practices, as well as best practices adopted by some utilities that the Commission believes should be adopted by utilities statewide. Furthermore, the Commission identified several trends that should be addressed immediately, such as a significant reduction of experienced lineworkers, the lack of useful technology in pinpointing outages, an undisciplined process for issuing accurate granular estimated restoration times and the utilities' unsystematic method of scrambling for mutual assistance.

The Commission thanks you for the opportunity to serve and looks forward to the implementation of our recommendations, as was the case with many of the recommendations included in the Commission's Interim Report. The State remains at significant risk of further, and perhaps even greater, damage from the increasing frequency and strength of storms. While the risk varies greatly by utility, we strongly believe that serious consideration of and immediate action on many of these recommendations is vital in order to protect the State's human and physical infrastructure.

Much appreciation is also extended to the dedicated Commission staff under the direction of Executive Director Regina Calcaterra and to all those who contributed their time and expertise to ensure that the State's power systems are better prepared for and equipped to respond to natural disasters.

Sincerely,

Co-Chair Robert Abrams

Co-Chair Benjamin Lawskey

Peter Bradford

Tony Collins

John Dyson

Rev. Floyd Flake

Mark Green

Joanie Mahoney

Kathleen Rice

Dan Tishman

1 EXECUTIVE SUMMARY

On November 13, 2012, Governor Andrew M. Cuomo established a commission under the Moreland Act¹ (Moreland Commission or Commission) to study New York's power utility companies' response to Hurricanes Irene and Sandy, Tropical Storm Lee, the December 2008 Ice Storm (Recent Storms) and other major storms impacting the State. The Commission was also tasked with reviewing the adequacy of regulatory oversight of the utilities and the mission of the State's energy agency and authority functions.² The Governor appointed ten commissioners, two of whom, Robert Abrams and Benjamin Lawsky, serve as co-chairs.

Due to the urgent need to address the delivery of power to the LIPA service area and the serious shortcomings in the PSC's authority over electric utilities, the Commission issued an Interim Report on January 7, 2013. Its findings and recommendations were based on documents obtained from subpoenas issued to the utilities, testimony of those who operate critical infrastructure such as fuel and telecommunication providers, and data received through witness interviews, public hearings, and other materials.

Interim Report Summary

The Interim Report discussed:

- How to remedy the ineffective manner in which LIPA addresses emergency planning, preparedness, and storm response;
- How the inherent defects in the current LIPA-National Grid structure can be avoided in the future by making the service provider for the existing LIPA service area and the owner of applicable utility assets one entity;
- How new oversight and enforcement mechanisms would permit the PSC to make utilities more accountable and responsive to regulators and customers; and
- How redundant and/or overlapping energy programs could be streamlined to allow resources to flow back to agency core missions.

The Interim Report included substantial legislative and internal regulatory and organizational changes to the PSC. The Commission is grateful that those changes were incorporated into legislation put forth by Governor Cuomo and adopted by the Legislature in the 2013-14 budget.³ The Commission looks forward to the same serious consideration of the recommendations set forth in this Final Report.

The Interim Report also provided four options for the much-needed restructuring of LIPA followed by the recommendation of a majority of the Commissioners in favor of privatization. As of this Report's publication, the Commission understands that legislation proposed by the Governor to privatize operations and maintenance of the LIPA's system and put LIPA under State oversight has passed in both the Senate and

¹ New York State Executive Law § 6.

² State of New York Executive Chamber, Governor's Press Office (2012). Governor Cuomo Launches Moreland Commission to Investigate and Study Utility Companies' Storm Preparation and Management; Recommend Reforms to Overhaul Regulation of Entire System to Better Deal With Emergencies [Press Release], *available at* <http://www.governor.ny.gov/press/11132012Section6> (last accessed 6/19/2013) and appended hereto (Appendix 8.1).

³ See Appendix 8.2 2013-14 State Budget Revisions to Public Service Law.

Assembly. This is a significant step in addressing the issues the Commission raised rather than to continue to subject LIPA customers to the epic management failures of the dysfunctional bifurcated structure that presently exists.

Final Report Summary

This Final Report covers the second phase of the Moreland Commission's activities, including:

- A summary of the findings of the IG's LIPA investigation as confirmed and supplemented by the Commission;
- Newly uncovered LIPA operational and management issues, some of which should be referred to a prosecutor for further investigation;
- An analysis of the energy efficiency programs regulated by the PSC and implemented by New York State Energy Research and Development Authority (NYSERDA) and the investor owned utilities, as well as recommendations for improving the programs' administration moving forward;
- An analysis of existing utility storm hardening practices and the dire need for investment in the state's utility infrastructure, plus recommendations on how best to pay for statewide system hardening;
- The Commission's finding that qualified PSC Commissioners are needed to steer the PSC;
- An analysis of the pitfalls of the unique *ex parte* rule exemption applied to Public Service Commissioners that allows the utilities unfettered and undisclosed access to the decision-makers;
- The Commission's finding that customers lack a fair opportunity to be heard by the PSC in critical matters;
- The outcome of the Commission's investigation into the State's investor owned utilities' storm preparation and recovery practices;
- A discussion of utility best practices that the PSC should ensure are implemented Statewide; and
- A discussion of industry trends which the Commission believes must be addressed immediately, including the significant reduction of experienced lineworkers, the lack of useful technology in pinpointing outages, the need for improved communication and coordination with county and municipal officials regarding life support equipment customers, an undisciplined damage assessment process and the lack of consistent or analytical methods for generating estimated times of restoration.

Final Report Investigation Process

The Final Report's content was developed through the issuance of document and witness subpoenas, document production and review, witness interviews and public hearings. In total, over 175,000 documents were received, totaling over 1 million pages of discovery; 10 hearings were held, consisting of testimony from 117 individuals;⁴ more than 90 stakeholder and witness interviews were conducted; and over 570 comments

⁴ See Appendix 8.3 Speakers at Statewide Public Hearings.

were received via the Commission's website and regular mail. The following is a summary of the Final Report's findings and recommendations.

LIPA Summary

In early 2011, LIPA revealed that it had overcharged ratepayers \$231 million in mistaken charges for line losses. LIPA also increased rates, once again bringing into question the applicability of a 1997 Public Authorities Control Board (PACB) rule requiring a PSC review when an average rate increase exceeds 2.5% in a 12-month period. In response to these developments, Governor Cuomo ordered the IG to investigate LIPA. Once the Moreland Commission commenced, it issued a letter to the IG seeking a halt to their efforts to avoid duplicative investigations. Thereafter, the Commission integrated pertinent aspects of the IG's investigation into the Commission's investigation such as the \$231 million line loss overcharge and the increase in the delivery charge.

While investigating these matters, the Commission discovered other disturbing trends in LIPA's accounting practices, operations and management structure. These findings fueled the Commission's conclusion that LIPA's failings do not just occur during weather emergencies. Specifically, LIPA lacks internal controls for reviewing consultant charges, which has led to potential overbilling, improper expensing, and other questionable charges passed on to ratepayers. Some of these practices may violate State and federal laws. Additionally, there appears to be a revolving door of employees moving between LIPA and its primary consultant, Navigant Consulting, Inc. (Navigant), which may violate State laws. These factors all contribute to an environment where improper business practices can thrive.

The highlights of the Commission's factual findings are summarized below:

- 1) According to LIPA's accounting department, between 2008 and 2011, LIPA paid over \$64.8 million on outside consultant contracts, \$43.4 million of which went to entities the Commission categorized as general Consulting and Engineering Services. The largest portion of the \$43.4 million, over \$28 million, was paid to Navigant. LIPA invoices reviewed from 2007 to 2013 reveal that Navigant conducted work on behalf of five departments at LIPA: Markets & Planning (Power Supply), Operations, Customer Relations, Finance and Retail Services. In the years reviewed, Markets & Planning, Operations, and Power Supply were consistently the largest users of Navigant's services. As it stands, Navigant is deeply involved with almost every aspect of LIPA's business because, as described by a LIPA employee to the Commission, LIPA hired Navigant "to watch National Grid."

As most Navigant consultants servicing LIPA during this time were senior in rank, hourly rates billed to LIPA ranged between \$300 and \$500, exclusive of expenses, for most of the 54 to 62 Navigant consultants that are contractually permitted to bill LIPA annually. Compounding the high billable rate is the fact that a few of Navigant's top consultants bill to LIPA in excess of 2,000 hours per year. From 2008-2012, Robert Kendall, Managing Director, who maintains residences in California and Utah, was Navigant's top billing consultant and alone billed LIPA for over \$4.5 million. During this time, Kendall consistently billed well over 2,000 hours per year, and in 2008 billed almost 3,500 hours. If the billable hours submitted by Kendall and possibly others prove to be embellished, there may exist civil or criminal violations of State and federal laws. Navigant transmitted invoices on behalf of Kendall to LIPA from their Chicago office via wire and fax. Many of these invoices contained generic language, which failed to describe the nature and scope of Kendall's services. Information reviewed also suggests possible double billing.

- 2) With many of the consultants servicing LIPA living out of state, LIPA incurred significant travel-related expenses. The vague language of the LIPA/Navigant agreement related to travel expenses imposes no restrictions or limits on spending and it is unclear what, if any, steps LIPA took to curb these types of expenses. In November 2007, LIPA reimbursed the consulting company \$6,815.30 for an 11-day hotel stay by one consultant at a hotel in New York City. This amount includes a daily cost of approximately \$542 per day for lodging. Current guidelines used by New York State mandate a cap of \$295 per day for lodging in Manhattan and an allowance of \$71 per day for meals and other incidentals. A Navigant consultant also expensed a trip from Washington, D.C. to Culebra, Puerto Rico, including charges for a seaplane flight from San Juan to the remote resort island. Navigant's company website lists this particular consultant as residing in the agency's Washington, D.C. office and no explanation was provided as to the need to travel to or from this locale. LIPA's then-Chief Financial Officer personally approved this expense. Additionally, LIPA paid a \$400 reimbursement for the full renewal fee for a consultant's engineering license in another state and a \$325 fee for an airline club membership.

After the Commission discovered the questionable billing and reimbursement practices and was advised by a witness that there was no auditing of the practices, there was a concern that if the practices were connected they may rise to a scheme to defraud. Once that threshold was met, the Commission found that further external investigation was warranted to determine if other Navigant consultants followed similar practices. If deemed improper, these actions may trigger both State and federal law violations and for this reason, the Moreland Commission is referring the matter to prosecutors for further investigation.

- 3) Michael Hervey, former LIPA Chief Operating Officer (COO) and Acting Chief Executive Officer (CEO), now serves as an Energy Consultant Director for Navigant in their Westbury, New York office. In 2010, Hervey personally signed a \$23 million contract extending Navigant's utility contracting services with LIPA for 5 years. In 2011 alone, Hervey directly received billings for approval of over 50% of the \$7.2 million billed by Navigant. While employed as LIPA's COO, Hervey reviewed and approved over \$15 million billed by Navigant to the Operations Department of LIPA, between 2007 and 2012. Hervey left LIPA in December 2012 after twelve years and joined Navigant shortly thereafter in January of 2013. While it is unknown whether Hervey is currently conducting business for Navigant on behalf of LIPA, the mere fact that Hervey previously approved a government contract with the very company that now employs him is of concern. In addition to Hervey, Jim Peterson, former Director of Power Contracts at LIPA from 2001 until July 2008, is now a Director at Navigant and appears on Navigant's LIPA Contractual Rates Sheet, with a cost of \$353 per billable hour for consulting services.
- 4) Another revolving door issue may exist for those contractors that formerly worked at Navigant and are now working for LIPA. David Clarke, LIPA Director of Power Markets, moved from Navigant to LIPA in September 2010. While at Navigant, Clarke billed work to LIPA's Power Markets team, the very team where he now serves as a director. Immediately after joining LIPA, several Navigant invoices involving Power Markets charges were addressed directly to Clarke. Additionally, John Little, LIPA's Director of Ratemaking, left Navigant in 2009 to join LIPA. Though to a much lesser extent than Clarke, Little has also directly received invoices from Navigant. This issue is particularly concerning given the fact that LIPA lacked any central controls for reviewing consultant/contractor charges and protecting against conflict of interests or appearances of impropriety.
- 5) In addition to the serious questions raised by LIPA's retention of Navigant, the Commission also addresses three issues that point at financial irregularities, lack of oversight and a disregard for

ratepayer dollars. These issues relate to LIPA's rate increase, its debt repayment practices, and its erroneous overcharge of \$231 million to its customers.

\$231 million line loss: In 2011, LIPA revealed a \$231 million line loss ratepayer overcharge, resulting from years of financial missteps. Faulty calculations persisted even after LIPA mid-level accounting staff first alerted its outside accounting firm KPMG and senior LIPA and National Grid finance professionals to the miscalculations. After evaluating LIPA's admitted faulty accounting practices, which the IG and the Commission confirmed, LIPA stated that the \$231 million line loss overcharge would be used to reduce costs for its customers. LIPA stated that it would apply \$129 million of the \$231 million directly through customer bill credits over a three year period, as well as indirectly, by putting \$72 million in its reserves and by terminating an outstanding \$30 million "Shoreham" acquisition adjustment debt. LIPA is presently two-and-a-half years into the three-year \$129 million ratepayer reimbursement period and the Commission has confirmed that the pro-rata portion of the \$129 million has been reimbursed to ratepayers. The Commission and the IG affirmed that the \$72 million and \$30 million have also been applied respectively.

Further, related to this issue is the actual line loss factor LIPA uses to bill customers. The IG calculated that LIPA's current system average line loss factor to be 6.2%. Accordingly, the Commission recommends that LIPA lower the assumed line loss factor it currently uses – 6.6% – and instead bill customers the lower actual line loss factor of 6.2%.

Delivery Charge Increase: The PACB issued a rule in 1997 stating that if LIPA increased their "average rate" over 2.5% in a twelve-month period, the rate increase must be approved by the PSC. However, the PSC was never given the legal authority to regulate LIPA in the manner that it regulates other utilities, and the PACB had no power to convey such authority. In *Alessi v. Acampora*, the court held that the PSC lacked the legal authority to review LIPA's rates, services and practices, notwithstanding the language of the PACB resolution. Nonetheless, the IG proceeded on its analysis to see if a LIPA rate increase effective in 2010 exceeded 2.5% and if it did, would it have warranted a PSC overview if the courts validated the PACB rule. The IG determined that LIPA increased its delivery charge by 4.3% and that LIPA disguised the increase by spreading the rate increase across the fluctuating power supply charge, delivery charge and energy efficiency charge (the entire bill) to produce an apparent increase of only 1.9%. However, if the total increase applies only to the delivery charge then the increase appears as 4.3%. Thus, it appears that LIPA may have known that they were raising the delivery charge by 4.3%, but publicly stated that the increase was only 1.9% to avoid criticism. The Commission concurs with the IG's conclusion.

Debt "Retirement" Explanation: LIPA states in public bond statements that it retired its original 1998 debt as follows:

Since the acquisition of [Long Island Lighting Company], the Authority has sought to effectively accelerate the retirement of the Authority's original \$6.7 billion indebtedness issued in 1998 in an amount approximately equal to the \$4.2 billion Acquisition Adjustment recorded in 1998 by 2013. Current projections show that the Authority should be able to *retire debt or fund capital expenditure* with operating cash flows in an aggregation amount that would meet or exceed the \$4.2 billion target by the end of 2013. (2012A and B official bond statements) (emphasis added)

However, LIPA did not retire the 1998 debt since it still has over \$1 billion of the \$4.2 billion debt outstanding. Rather than saying that they did not retire the entire debt, LIPA explained that they used over \$1 billion in cash to pay for capital expenditures that could otherwise have been paid for via debt issuances, thus increasing LIPA's debt. They contend that the fact they paid cash rather than reissued new debt for capital expenditures should be applied towards their debt retirement obligation. The Commission has deemed LIPA's logic is flawed because it is circular and assumes that all capital expenditures should and will be funded through issuance of debt.

In sum, the issues related to consultant billings, travel expenses, \$231 million line loss, delivery overcharge increase and the debt retirement description point to a pattern of lack of oversight, improper accounting, lack of transparency and an unorthodox representation of their debt management plan. These raise significant questions about the accuracy and reliability of LIPA's financial reporting and how it operates, independent of extreme weather conditions.

Policy Summary

The Commission has determined that the over 100 Energy Efficiency Portfolio Standard (EEPS) programs regulated by the PSC, and administered by NYSEERDA and the Utilities, have led to customer confusion and unnecessary competition between a State agency and the investor owned utilities. In addition, the Commission identified a failure to maintain the appropriate data collection to determine best practices for a program with a seven-year, \$3.1 billion ratepayer-funded commitment. The Commission recommends that the PSC continue regulating the EEPS program, but that the responsibility for program administration is clearly delineated between NYSEERDA and the investor owned utilities so they are not competing for the same customer base. Furthermore, the Commission strongly suggests that the PSC begin collecting appropriate EEPS data to populate an electronic public database, enabling a program-to-program comparison so ratepayers and industry stakeholders can ascertain the value of their \$3.1 billion investment.

Other Commission recommendations include:

- That the utilities harden their systems by prioritizing investments in infrastructure to be more resilient to the ever-increasing threat of severe weather. Further, a recommendation that the infrastructure hardening costs be paid as a preferred first step, by redirecting the Public Service Law § 18-a funding that is currently collected from ratepayers through the temporary state energy and utility service conservation assessment and provided to the State General Fund to now support electric infrastructure hardening investments. This will likely not provide sufficient resources, so among other funding options are redirection of clean energy funds and the development of an "Anti-Hurricane Feebate Program." The Commission believes, as difficult and costly as it may be, that it is better to pay for storm hardening now, rather than pay the devastating costs that failure to harden will cost later.
- By far the most effective way to elevate the quality of regulatory decision making in New York is through the appointments process. No statutory changes are necessary for the Governor to appoint PSC Commissioners who have clearly demonstrated commitment, ability and a capacity for teamwork when it comes to protecting the public and the environment. The legislative, regulatory and organizational improvements that the Commission has proposed are important, but they will mean little without excellent PSC leadership reinforced by Executive Branch support.
- The State should create an independent consumer advocacy board that represents all utility ratepayers in rate cases and general consumer-related functions.

- Existing statutory exemption of *ex parte* rules as they relate to PSC Commissioners should be eliminated. The current PSC exemption provides the utilities with non-discoverable, unfettered access to the ultimate utility regulatory decision makers – the Public Service Commissioners themselves.

Utility Investigation Summary

The Commission has identified industry-wide deficiencies that need to be addressed across all utilities in the State, including:

- Replenishing the depleted rank of lineworkers in the industry;
- Flaws in the drafting, drilling and actual effectiveness of utility emergency response plans;
- Failure to develop localized estimated restoration times (as opposed to global estimated restoration times), and failure to explain the difference between these two estimates to customers;
- Failure to make use of available technology to pinpoint individual home outages;
- The absence of fuel terminals and certain telecommunications from utilities' lists of critical infrastructure requiring priority power restoration;
- Inadequate planning for the effects of storm surge flooding; and
- A need for a more fair and equitable management of mutual assistance.

Furthermore, the Commission has identified individual concerns and, where appropriate, made specific recommendations for each investor owned utility (IOU) investigated: (1) Consolidated Edison Company of New York, Inc. (Con Edison), (2) Orange and Rockland Utilities (O&R), (3) New York State Electric and Gas (NYSEG), (4) Rochester Gas and Electric (RG&E), (5) Central Hudson Gas and Electric (Central Hudson), and (6) Niagara Mohawk Power Corporation d/b/a National Grid New York (Grid New York). These findings and recommendations can be found in each utility's respective section of this report.

The Commission hopes this Final Report will validate the need for the immediate consideration of the Commission's recommendations by the Governor and the Legislature.

2 BACKGROUND

As described in great detail in the Interim Report, Hurricane Sandy was a storm of enormous proportions that left a trail of destruction and devastation in its wake. The specifics of the Storm's tracking and the particulars of the immediate flooding aftermath are well documented in the Interim Report. In brief:

- Sandy was the largest hurricane ever recorded in the Atlantic Ocean, measuring 1,000 miles in diameter, which is about the size of Hurricanes Isaac and Irene combined.
- Hurricane Sandy claimed at least 131 lives in the United States, including 53 New Yorkers.

- Sandy caused 8.5 million power outages across 21 states, the highest outage total ever.⁵ At its peak, there were 2.2 million power outages in New York State, most of them in New York City and on Long Island. At the peak, 90% of LIPA's 1.1 million customers were without power and Con Edison reported outages affecting more than 900,000 in its service territory, which covers New York City and Westchester County. In addition, there were approximately 420,000 outages in upstate New York.
- Initial estimates indicated that more than 305,000 housing units were damaged or destroyed.

The financial toll was equally staggering: estimates indicate that the storm will cost the State more than \$42 billion.⁶ Storm clean up and repair costs are estimated at more than \$32 billion, including more than \$15 billion in New York City and \$9 billion in mitigation and preparation costs for future storms.⁷ One State entity, the Metropolitan Transportation Authority, calculated the cost of damage to its infrastructure and equipment at \$4.755 billion⁸ and projected that it might cost \$600 million just to repair the South Ferry-Whitehall Street subway stop in Lower Manhattan.⁹ The numbers cited here are initial projections which, unfortunately, have likely grown in the nearly eight months since the storm.

3 LIPA INVESTIGATION

3.1 LIPA'S CONTINUOUS STRUGGLE TO MEET ITS MANDATE

The State Legislature created LIPA in 1985 in response to growing dissatisfaction with the Long Island Lighting Company (LILCO), Long Island's primary electric utility. LILCO was a publicly traded, shareholder-owned corporation that supplied both retail electric and gas service to Long Island residents. However, by the 1980s, the public had lost confidence in LILCO's ability to supply electricity in a reliable, cost-effective, and safe manner. Public confidence eroded due to LILCO's escalating electricity charges and its controversial decision to construct the Shoreham nuclear power plant. LILCO's investment in the Shoreham plant necessitated significant rate increases, which strained the economic capabilities of Long Island residents.

To address this growing crisis, in 1985, the State Legislature created LIPA, a public power authority, to replace LILCO.¹⁰ LIPA's mission was to curb excessive electricity costs within the LILCO service area.¹¹ Specifically, its enabling statute declared, in relevant part, that LIPA would provide:

⁵ U.S. Department of Energy, Office of Electricity Delivery & Energy Reliability, Hurricane Sandy Situation Report #20, Nov. 7, 2012, *available at* http://www.oe.netl.doe.gov/docs/2012_SitRep20_Sandy_11072012_1000AM.pdf (last accessed 6/19/2013).

⁶ Governor Cuomo, *Two Year Progress Report* at 35 (December 2012), *available at* <http://www.governor.ny.gov/assets/documents/twoyearprogressreport.pdf> (last accessed 6/19/2013).

⁷ Governor Cuomo, November 26, 2012 Press Release, *available at* <http://www.governor.ny.gov/press/11262012-damageassessment> (last accessed 6/19/2013).

⁸ Metropolitan Transit Authority, Sandy Recovery Work Estimate, *available at* http://web.mta.info/nyct/service/cuomo_130524.html (last accessed 6/19/2013).

⁹ Metropolitan Transit Authority, Restoration South Ferry Station, *available at* <http://www.mta.info/nyct/service/RestoringSouthFerryStation.htm> (last accessed 6/19/2013).

¹⁰ New York State Public Authorities Law § 1020-a.

¹¹ New York Public Authorities Law § 1020; New York Public Authorities Control Board: Resolution No. 97-LI-1.

safe and adequate service at rates which will be lower than the rates which would otherwise result and will facilitate the shifting of investment into more beneficial energy demand/energy supply management alternatives, realizing savings for the ratepayers and taxpayers in the service area and otherwise restoring the confidence and protecting the interests of ratepayers and the economy in the service area. Moreover, in such circumstances the replacement of such investor owned utilities by such an authority will result in an improved system and reduction of future costs and a safer, more efficient, reliable and economical supply of electric energy.

LIPA finally acquired LILCO's assets in 1998 and became the retail supplier of electric service for Long Island residents. Pursuant to the 1998 merger, LIPA acquired LILCO's electrical transmission and distribution system, as well as certain other assets. With one exception, LIPA did not acquire LILCO's electric generating facilities.

LIPA has since become one of the largest municipal electricity utilities in the nation in terms of customers served. It provides electric service to approximately 1.1 million customers across Nassau and Suffolk counties and the Rockaway Peninsula in Queens County (Service Area).¹² In 2011 its annual revenue reached over \$3.6 billion.¹³

To operate their capital assets, and in order to secure power supply, LIPA entered into a Management Services Agreement (MSA) with LILCO in 1998, which has since been transferred to National Grid. This MSA governs a bifurcated system where LIPA owns the transmission and distribution (T&D) system on Long Island and National Grid handles aspects of the system's routine function. National Grid has three main functions under this MSA: (1) operation and maintenance of the T&D system;¹⁴ (2) repair of the T&D system,¹⁵ and (3) provision of customer service.¹⁶ Following a recent competitive bidding process, LIPA is slated to transfer the duties of National Grid to Public Service Enterprise Group (PSEG), after PSEG submitted a winning bid to provide the next generation of T&D services to LIPA. The current MSA between LIPA and National Grid is set to expire on December 31, 2013.

3.2 CONSULTANTS

In its Interim Report, the Commission found significant shortcomings at LIPA that inhibits its ability to effectively manage significant weather events. Noting the extent of LIPA's failings under "grey sky" conditions, the Commission deemed it necessary to turn to an examination of the managerial activity occurring at LIPA on typical "blue sky" days. As discussed previously, LIPA contracts with National Grid, to carry out the operations of LIPA's Transmission and Distribution system, as well as to provide services related to customer service and routine monthly billing. Since National Grid is charged with the day-to-day operations of LIPA, LIPA's staff of approximately 100 employees is primarily limited to financial, legal, management and procurement duties (administrative duties). Despite this limited charge, LIPA supplements its staff and resources with a wide range of costly financial, legal, engineering and other consultants.

In the course of its investigation into LIPA's administrative duties, the Moreland Commission uncovered troubling information concerning LIPA's relationships with outside consultants. Specifically, LIPA's

¹² Nassau County Villages of Freeport and Rockville Center and Suffolk County Village of Greenport are not within LIPA's service area.

¹³ Energy Information Administration Survey form EIA-861-2011 Annual Electric Power Industry Report, available at <http://www.eia.gov/electricity/data/eia861/> (last accessed 6/19/2013).

¹⁴ MSA § 4.2.

¹⁵ MSA § 4.3.

¹⁶ MSA § 4.9.

relationship with Navigant strikes a particularly questionable chord. The primary problem appears to be that LIPA lacks effective quality controls for reviewing consultant charges. As such, there may be several alleged instances of overbilling, improper expensing, and other questionable charges passed on to the ratepayers. Additionally, there appears to be a revolving door of employees moving from LIPA to Navigant and vice versa, which may violate State laws. These factors all contribute to an environment where improper business practices can thrive.

According to documents provided to the Commission from LIPA's Accounts Payable Department, between 2008 and 2011, LIPA paid outside consultants over \$64 million of which the largest portion, \$28 million, was paid to Navigant.¹⁷ The Commission found that LIPA's consultant expense approval system creates an atmosphere that lends itself to confusion. Navigant invoices are sometimes forwarded to different persons within the same department for approval and processing.¹⁸ Further complicating matters, there are different individuals receiving Navigant invoices during the same billing cycle.¹⁹ With different departments authorizing work on several ongoing projects, it is possible that work performed by Navigant is duplicative in both deliverables and costs.

3.2.1 NAVIGANT CONSULTANT BILLING ISSUES

LIPA invoices reviewed from 2007 to 2013 reveal that Navigant conducted work on behalf of five departments at LIPA: Markets & Planning (Power Supply), Operations, Customer Relations, Finance, and Retail Services. In the years reviewed, Markets & Planning, Operations, and Power Supply were consistently the largest users of Navigant's services. Navigant is deeply involved with almost every aspect of LIPA's business. As most of the 52-64 Navigant consultants servicing LIPA during this period are senior in rank, hourly rates billed to LIPA can range between \$300 and \$500, exclusive of expenses.

High Billable Hours

Compounding the high billable rate is the fact that a few of Navigant's top consultants bill LIPA in excess of 1,800 hours per year.²⁰ From 2008-2012, Robert Kendall, Managing Director, who maintains residences in California and Utah, was Navigant's top billing consultant to LIPA and alone billed LIPA over \$4.5 million.²¹ During this time, Kendall often billed well over 2,000 hours a year and in 2008 billed almost 3,500 hours.²² These hourly charges were approved and paid despite internal questions regarding their propriety. In an interview with the Moreland Commission, LIPA Vice President of Finance Ken Kane (formerly LIPA Controller) admitted that upon uncovering Robert Kendall's annual billable hours charged to LIPA, he

¹⁷ Between 2008 and 2011, Navigant billed LIPA a total of \$28,066,870. See Appendix 8.4 LIPA Professional Services.

¹⁸ For example, in calendar year 2012, both Michael Deering and Bruce Germano reviewed and authorized invoices for the Retail Services Department. Navigant Consulting, Inc. Invoice no. 381917 (Dec. 27, 2012) (LIPA(MC)000166966) and Navigant Consulting, Inc. Invoice no. 379364 (Nov. 27, 2012) (LIPA(MC)000166350).

¹⁹ For example, in April 2012, David Clarke, Jim Parmelee, and Ed Petrocelli received various Navigant invoices for Markets & Planning Department while Paul DeCotis approved these invoice. Navigant Consulting, Inc. Invoice no. 360297 (April 17, 2012) (LIPA(MC)000164033) (forwarded to Ed Petrocelli); Navigant Consulting, Inc. Invoice no. 360227 (April 18, 2012) (LIPA(MC)000163991) (forwarded to Jim Parmelee; Navigant Consulting, Inc. Invoice no. 360523 (April 19, 2012) (LIPA(MC)000164015) (forwarded to David Clarke).

²⁰ See Appendix 8.5 Navigant Billing to LIPA by Employee 2008-2012 (Robert Kendall 2008-2011; Raymond Hergert 2008; Parag Soni 2008; Dia Koujak 2008; Thomas Savin 2011).

²¹ *Id.*

²² *Id.*

questioned the Vice President of Power Markets and his staff as to the accuracy of such numbers. Upon the Power Markets Vice President's confirmation of the charges, the invoices were paid with no further investigation. Without an oversight mechanism in place to review across divisions, review of Kendall's cumulative billings may not have occurred as he occasionally billed multiple divisions in a single billing period.²³ The high billable rate combined with five of Navigant's consultants billing in excess of 1,800 hours per year resulted in astronomical expenses for LIPA, all of which are passed to the ratepayer.²⁴

Inadequate Descriptions of Services Rendered

Upon closer review of Navigant's invoices, the Commission found that some consultants bill their hours without a clear description of services rendered. Without such a description, it is impossible for department heads to review whether the hours billed correspond properly to the deliverables. For example, in several invoices in 2010, another Navigant Managing Director failed to include descriptions of the hours she billed LIPA.²⁵ Since this Managing Director's hourly billing rate is \$488 and she billed over \$200,000 in 2010, it is reasonable that LIPA should have taken steps to confirm her deliverables in light of the large expense to ratepayers.

Operating under the auspices of its \$23 million open contract, Navigant routinely submits proposals to assist LIPA with projects falling under varied scopes of work. The Commission's review found that Navigant proposed use of its services on several matters, including the evaluation of Request for Proposals (RFP) responses for LIPA's Mutual Services Agreement, assistance in weighing the benefits of acquiring ownership of an underwater electric cable company, and even in deciding whether to retain the consulting services of another specialized consulting firm. The methodology employed by LIPA in allocating funds under the approved \$23 million contract with Navigant is unclear. Specific projects expanded in scope without clear rationale. For example, for consulting work involving LIPA's RFP for the Mutual Services Agreement, Navigant was originally allocated \$825,000 for its efforts. Citing additional hours and tasks that would be required to complete this work, the Vice President of Power Markets authorized an increase in funding to \$1.8 million for the same project.²⁶ Navigant's work appears to be growing more routine and non-temporary in nature as a part of LIPA's business.

3.2.2 QUESTIONABLE REIMBURSEMENT OF NAVIGANT CONSULTANT EXPENSES

The Commission reviewed a written consulting agreement between LIPA and Navigant with respect to reimbursement for expenses (the Agreement). Under the Agreement, the consulting company is entitled to seek reimbursement for "reasonable" expenses incurred by its employees. Specifically, Article VI, Section 6.5 (Travel, Food, Lodging) of the Agreement states, in relevant part: "All reasonable travel, food, and lodging expenses associated with the provision of service hereunder, excluding automobile mileage, shall be billed at cost."²⁷ Although many of the consultants servicing LIPA lived out of state, and LIPA incurred significant travel-related expenses, the vague language of the Agreement imposes no further restrictions or limits on spending.

²³ Navigant Consulting, Inc. Invoice no. 298922 (Mar. 31, 2010) (LIPA(MC)000155672-74) (where Kendall billed to Markets & Planning) and Navigant Consulting, Inc. Invoice no. 298938 (Mar. 31, 2010) (LIPA(MC)000156666-78)(where Kendall billed to Operations).

²⁴ See Appendix 8.5 Navigant Billing to LIPA by Employee 2008-2012.

²⁵ Navigant Consulting, Inc. Invoice no. 330467 (Apr. 30, 2011) (LIPA(MC)000160056-279).

²⁶ Memo from Paul DeCotis to Robert Kendall (June 17, 2011) (LIPA(MC)000108075).

²⁷ Navigant Consultant Contract (Mar. 15, 2010) (LIPA(MC)000106141-180).

Furthermore, it is unclear what, if any, steps LIPA took to curb these types of expenses. In order to assess the reasonableness of the consulting expenses, the Commission compared per diem amounts for travel, food and lodging allowed by New York State policies for State agencies, with LIPA consulting expenses. The Commission uncovered a number of instances where the cost of travel, food and lodging far exceeded the amounts permitted by State policy. For example, in November 2007, LIPA reimbursed the consulting company \$6,815.30 for an 11-day hotel stay by one consultant at a hotel in New York City.²⁸ This amount includes a daily cost of approximately \$542 per day for lodging. Because LIPA is a New York State authority, the State's use of federal General Services Administration (GSA) per diem guidelines offers a useful comparison.²⁹ Current GSA guidelines mandate a cap of \$295 per day for lodging in Manhattan and an allowance of \$71 per day for meals and other incidentals.³⁰ One may question why Navigant does not apply these per diem rules when work is being conducted for a state government entity.

Similarly, the Commission found numerous instances where LIPA reimbursed the consulting company for meals at rates above typical government rates. In one instance, LIPA reimbursed the consulting company for meals and incidentals for a single consultant on October 22, 2007, in the amount of \$197.01, including \$85 for dinner and \$45.06 for lunch. In addition, LIPA reimbursed the consulting company for two meals consumed at a midtown New York City restaurant in the amounts of \$145 and \$91.³¹

In 2009 alone, the Commission identified several questionable expenses that were paid by LIPA. For instance, a Navigant consultant expensed a trip from Washington, D.C. to Culebra, Puerto Rico, including charges for a seaplane flight from San Juan to the remote resort island.³² Navigant's company website lists this particular consultant as residing in the agency's Washington, D.C. office and no explanation was provided as to the need to travel to or from this locale. LIPA's then-Chief Financial Officer personally approved this expense, which was passed on to ratepayers. On another occasion, a Navigant consultant flew from New York City's LaGuardia Airport to Albany, New York at a cost of \$329.50, where train service along the same route typically offers a dramatically more affordable price.³³ Furthermore, the Commission found that Navigant consultants sometimes chose far more expensive business class options when traveling by train and plane, incurring exorbitant costs.³⁴ Furthermore, a June 2009 set of expenses was approved by LIPA without the furnishing of receipts, despite an internal LIPA rule that non-receipted expenses will not be approved. Other questionable expenses paid by LIPA include a \$400 reimbursement representing the full renewal fee for a consultant's engineering license in another state and a \$325 fee for an airline club membership.³⁵ Ultimately, LIPA ratepayers were held responsible for all of these questionable expenses.

After the Commission discovered the questionable billing and reimbursement practices and was advised by a witness that there was no auditing of the practices, there was a concern that if the practices were connected

²⁸ Navigant Consulting, Inc. Invoice no. 233288 (Dec. 31, 2007) (LIPA(MC)000142103) (where Kendall's 11 day stay at the New York Marriott cost \$6,852.47).

²⁹ Office of the New York State Comptroller, NYS Travel Information, *available at* <http://www.osc.state.ny.us/agencies/travel/reimbrate.htm> (last accessed 6/14/2013) ("New York State uses the per diem rates established by the Federal Government").

³⁰ U.S. General Services Administration, Per Diem Guidelines for ZIP Code 10022, *available at* <http://www.gsa.gov/portal/category/100120> (last accessed 6/14/2013).

³¹ Navigant Consulting, Inc., Invoice no. 235439 (Jan. 31, 2008) (LIPA(MC)000142782-142838) (where Kendall billed over \$80 on four separate occasions for dinner).

³² Navigant Consulting, Inc., Invoice no. 267323 (Feb. 11, 2009) (LIPA(MC)000149370-406).

³³ Navigant Consulting, Inc., Invoice no. 266119 (Jan. 31, 2009) (LIPA(MC)000148041-191).

³⁴ Navigant Consulting, Inc., Invoice no. 280793 (July 31, 2009) (LIPA(MC)000152155-318); Navigant Consulting, Inc., Invoice no. 287755 (Oct. 31, 2009) (LIPA(MC)000153113-157).

³⁵ Navigant Consulting, Inc., Invoice no. 307997 (July 31, 2010) (LIPA(MC)000157167-312).

they may rise to a scheme to defraud. Once that threshold was met, the Commission found that further external investigation was warranted to determine if other Navigant consultants followed similar practices. If deemed improper, these actions may trigger both State and federal law violations and for this reason, the Moreland Commission is referring the matter to prosecutors for further investigation.

3.2.3 REVOLVING DOOR ISSUES

In the course of the Commission's review of LIPA's contract with Navigant Consulting, it was discovered that some of LIPA's employees formerly worked at Navigant on the LIPA contract and some of LIPA's former employees are now contractors with Navigant. These relationships may trigger violations of State law.

Michael Hervey, former LIPA COO and Acting CEO, now serves as an Energy Consultant Director for Navigant. In 2010, Hervey personally signed a \$23 million contract extending Navigant's utility contracting services for 5 years.³⁶ In 2011 alone, Hervey approved 50% of the \$7.2 million in invoices billed to LIPA by Navigant. While employed as LIPA's COO and later, Acting CEO, Hervey reviewed and approved over \$15 million billed by Navigant to the Operations Division of LIPA between 2007 and 2012.³⁷ Hervey left LIPA in December 2012 after twelve years at LIPA and joined Navigant shortly thereafter in January of 2013.³⁸ While it is unknown whether Hervey is currently conducting business for LIPA on behalf of Navigant, the mere fact that Hervey approved a government contract with the very company that now employs him is of concern. In addition to Hervey, Jim Peterson, former Director of Power Contracts at LIPA from 2001 until July 2008, is now a Director at Navigant and appears on Navigant's Rate Sheet at a cost of \$353 per billable hour for consulting services.³⁹

Furthermore, another potential revolving door issue may exist for those contractors that formerly worked at Navigant and are now working for LIPA.⁴⁰ David Clarke, LIPA Director of Power Markets, moved from Navigant to LIPA in September 2010.⁴¹ While a consultant at Navigant, Clarke billed work to LIPA's Power Markets team, the very team where he is now a director. Immediately after joining LIPA, several Navigant invoices involving Power Markets charges were addressed directly to Clarke and approved by his manager, the Vice President of Power Markets.⁴² Additionally, John Little, LIPA's Director of Ratemaking, left Navigant in 2009 to join LIPA.⁴³ Though to a much lesser extent than Clarke, Little has also directly received invoices from Navigant. LIPA department heads, such as the Vice President of Power Markets in the case of Clarke and Little, hold the sole responsibility for approving Navigant invoices related to work done on behalf of their individual department. While the Controller receives expense reports approved by department heads, it appears that he or she simply forwards these on to Accounts Payable for processing. This revolving door is particularly concerning given the fact that LIPA lacked any central controls for reviewing consultant/contractor charges and protecting against conflict of interests or appearances of impropriety.

³⁶ March 24, 2010 Navigant Contract Execution Authorization for President and Chief Executive Officer (LIPA (MC)000106263) (signed by Michael Hervey, Sr. Vice President – Operations).

³⁷ See Appendix 8.6 Navigant Billing to LIPA by Department 2007-2012.

³⁸ See Appendix 8.7 Michael Hervey's LinkedIn Profile.

³⁹ Navigant Contract, *supra* n. 26 at schedule C; LinkedIn Profile for Jim Peterson, <http://www.linkedin.com/pub/jim-peterson/48/22/5b1> (last accessed 5/9/2013).

⁴⁰ Public Officer's Law §74 (3).

⁴¹ LinkedIn Profile for David Clarke, <http://www.linkedin.com/pub/dave-clarke/53/7b4/abb> (last accessed 5/9/2013).

⁴² Navigant Consulting, Inc., Invoice no. 317134 (Nov. 30, 2010) (LIPA(MC)000158325- 358); Navigant Consulting, Inc., Invoice no. 319956 (Dec. 31, 2010) (LIPA(MC)000158258-289).

⁴³ LinkedIn Profile for John Little, <http://www.linkedin.com/pub/john-little/66/569/b33> (last accessed 6/18/2013).

Recommendation for Further Action:

- **Following its review of LIPA's business relationships with Navigant, the Commission finds that the matter should be referred to a prosecutorial body of competent jurisdiction for further review of LIPA's third party consultants and related individuals or entities.**

3.3 ACCOUNTING PRACTICES

Based upon the IG's investigation, the Commission also reviewed three issues that point to significant financial irregularities and disregard for ratepayer dollars. These issues relate to LIPA's rate increases, its debt repayment practices, and its erroneous overcharge of \$231 million to its customers as discussed below.

3.3.1 THE 2011 DELIVERY CHARGE INCREASE

From LIPA's inception, various cosmetic half-measures have purported to impose some PSC oversight. In fact, none of these measures have given the PSC a mandate and clear statutory authority over LIPA's Service Area. If the PSC is to protect ratepayers, this era of ineffectual oversight should end. They must have the same ability to require regular reporting and to apply rules and regulations as done elsewhere in New York. Special provision may be necessary to assure debt repayment but these should not compromise the fundamental principle of adequate consumer protection.

In 1997, the PACB issued a resolution that attempted to limit increases in LIPA's "average rate." The PACB resolution stated that LIPA could not raise its "average customer rates" by more than 2.5% over a 12-month period without the PSC's review and approval.⁴⁴ However, there were a number of problems interpreting this resolution: the PACB resolution does not define "average customer rates," does not specify how average customer rates are calculated, and does not take into account average increases in rates over all classes. The ambiguities in the PACB resolution, however, were rendered moot in 2006. The New York Supreme Court ruled in *Alessi v. Acampora* that the PSC lacked jurisdiction to review LIPA's rates, services, and practices.⁴⁵ Therefore, despite the PACB resolution, the PSC lacks the legal authority to review LIPA's rates, services, and practices.

In March 2011, LIPA approved a Delivery Charge increase that was purported to be only 1.9%. The Delivery Charge allows LIPA to recover the cost of transmitting and distributing the electricity that it purchases and transmits to customers. Here, LIPA made numerous public representations affirming the 1.9% increase. For example, on a customer bill dated March 15, 2011, LIPA stated: "Effective March 1, 2011, the Delivery and System Charges have increased approximately 1.9%."⁴⁶

Following LIPA's Delivery Charge increase, the IG initiated an investigation into the veracity of LIPA's Delivery Charge claims. Because LIPA's base rate has essentially become its Delivery Charge, the IG examined the evolution of LIPA's base rate between 1998 and 2011, which guided them in their conclusion that LIPA had

⁴⁴ N.Y.S. Pub. Auth. Control Bd., Resolution 97-LI-1, Approving Certain Specified Projects of the Long Island Power Authority, at pp. 8-9 (July 16, 1997) "LIPA will not implement an increase in average customer rates exceeding two and one half percent over a twelve month period, nor will LIPA extend or reestablish any portion of a temporary rate increase over two and one half percent, without approval of the [PSC] following a full evidentiary hearing."

⁴⁵ *SRG Properties LLC v. Long Island Power Authority*, NY Slip Op. 31196, 2009 N.Y. Misc. LEXIS 5744, at *13 (N.Y. Misc. 2009) (citing *Alessi v. Acampora*, NYPSC and Long Island Power Authority, Index No. 2098-2007 (N.Y. Sup. Ct. Albany County 2007)).

⁴⁶ Information gleaned from IG's investigation of LIPA.

actually increased its Delivery Charge by approximately 4.3%, which was more than double the 1.9% figure that LIPA had been publicly claiming.

In light of its broad mandate, the Commission has undertaken a review of the IG's findings as they relate to LIPA's Delivery Charge. The Commission has verified the IG's finding that LIPA's 1.9% Delivery Charge increase was in reality an increase of 4.3%. The reported 1.9% increase did not represent the actual increased charge to customers, but rather, represented the effect of the Delivery Charge revenue increase on LIPA's total revenue. In other words, the reported 1.9% increase reflected the change in the Delivery Charge revenue as a share of the *total* revenue. This would include revenue generated from all charges such as the Delivery Charge, the Power Supply Charge, and the Efficiency and Renewables Charge.⁴⁷ The correct Delivery Charge figure is calculated by dividing the total system revenue increase over 12 months (\$69,015,000) by the projected delivery revenues (\$1.6 billion), which produces a total Delivery Charge increase of approximately 4.3%. Thus, despite LIPA's statements that the Delivery Charge increase was only 1.9%,⁴⁸ LIPA had, in reality, increased its delivery charge by approximately 4.3%.

3.3.2 LIPA'S DEBT LEVEL

In order to finance its LILCO acquisition in 1998, LIPA issued tax-exempt debt of \$6.7 billion. As part of the merger, LIPA acquired \$4.2 billion debt associated with LILCO's investment in the then-defunct Shoreham nuclear power plant (the Shoreham Debt). Consequently, more than \$4 billion of the \$6.7 billion of debt was primarily used to cover that debt. As such, LIPA's purchase price exceeded the value of the assets it acquired through the merger.

As set forth in LIPA's 1998 bond statement, LIPA's Board of Trustees approved an acquisition plan that contemplated "accelerat[ing] the retirement of the portion of debt issued under the Plan of Finance relating to the \$4.2 billion intangible asset principally attributable to the Shoreham Regulatory Asset." LIPA committed to "retire this portion of the debt in approximately 16 years . . ." Notwithstanding this commitment, as of 2010, LIPA still carried outstanding bond debt of nearly \$7 billion on which it pays approximately \$300 million per year in interest.⁴⁹

3.3.3 DEBT REPAYMENT PRACTICES

In the series 1998A official bond statement, LIPA's Board approved a debt retirement plan to retire the \$4.2 billion intangible asset booked as the Acquisition Adjustment by 2013. The 1998A bond official statement specifically described the target as follows:

"[T]o accelerate the retirement of the portion of debt issued under the Plan of Finance relating to the \$4.2 billion intangible asset principally attributable to the Shoreham Regulatory Asset (the Acquisition Adjustment reflected on LIPA's pro-forma consolidated balance sheet in Appendix B to Part 2 of this Official Statement)."⁵⁰

LIPA has recently claimed that it will meet its 1998 debt retirement target. Nevertheless in the series 2012A and B official bond statements, LIPA stated:

⁴⁷ See Appendix 8.8 Components of LIPA Customer Bills – 2011 (1.9% Increase in *Entire* Bill).

⁴⁸ Feb. 24, 2011 LIPA Meeting of Board of Trustees Transcript at 28:19-39:17 (LIPA(MC)000011350).

⁴⁹ "[T]o accelerate the retirement of the portion of [T] debt issued under the Plan of Finance relating to the \$4.2 billion intangible asset principally attributable to the Shoreham Regulatory Asset (the Acquisition Adjustment reflected on LIPA's pro- forma consolidated balance sheet in Appendix B to Part 2 of this Official Statement)." Official statement of the LIPA electricity system general revenue Bonds-Series 1998A (May 13, 1998).

⁵⁰ *Id.*

“Since the acquisition of LILCO, the Authority has sought to effectively accelerate the retirement of Authority’s original \$6.7 billion indebtedness issued in 1998 in an amount approximately equal to the \$4.2 billion Acquisition Adjustment recorded in 1998 by 2013. Current projections show that the Authority should be able to *retire debt or fund capital expenditure* with operating cash flows in an aggregation amount that would meet or exceed the \$4.2 billion target by the end of 2013”⁵¹ (emphasis added).

Specifically, LIPA expects to meet the \$4.2 billion target by: (i) repaying a total of \$2.614 billion in principal payment using cash by 2013; (ii) expending approximately \$1.265 billion of cash funded capital expenditures; and (iii) earmarking an additional \$0.455 billion of capital expenditures to be spent by 2013.⁵² In other words, LIPA has designated the use of cash to purchase additional capital towards achieving the \$4.2 billion debt retirement goal rather than taking on additional debt to fund new capital expenditures. However, avoiding the issuance of new debt is not equivalent to retiring debt. The Commission has deemed LIPA’s analysis to be flawed and circular logic, and that it assumes all capital expenditures should be funded through issuance of debt.

In summary, while LIPA has largely replaced original issue debt such that only a small amount remains (\$143.1 million at December 21, 2012), the overall debt level remains virtually the same as it was in 1998 (\$6.8 billion but with the addition of \$2.88 billion in capitalized leases and \$1.4 billion in operating leases to finance generation projects). While reasons may exist for maintaining this level of debt and deviating from a debt retirement target that was established by its Trustees in 1998, LIPA has not clearly described such management decisions to the public.

3.3.4 THE \$231 MILLION ERROR RELATED TO LINE LOSS

In early 2011, LIPA announced that it discovered a \$231 million error that affected its customers. LIPA attributed this error to a faulty methodology it had been using for a number of years to estimate the amount and price of line losses. LIPA made the following announcement on its Web site:

The methodology that has been used to estimate the amount and price of those lines losses has been changed because it was determined that the calculation being used became inaccurate over time, and resulted in the collection of \$231M of revenue.⁵³

Line loss is the amount of energy purchased from generating companies but lost in the transmission and distribution process due to factors including electromagnetic losses, service theft, and meter inaccuracies during the transmission and distribution process. The lost energy is never delivered to customers as an inevitable and common circumstance in the utility industry.

In general, the electricity transmission and distribution losses (Lost and Unaccounted energy or L&U) represent the difference between electricity generated at the power plants as reported by the generating companies (Electric System Requirement) and the level of consumer energy usage indicated on the customer meters. LIPA uses the term “line losses” generally to refer to L&U. When customers are charged for the quantities of electricity (in kilowatt hours or kWh) indicated on their meters, these quantities do not include the kWh of electricity that were purchased and paid for by LIPA but were lost during transmission and

⁵¹ Long Island Power Authority. Electricity System General Revenue Bonds-Series 2012A and B (June 27, 2012).

⁵² Information gleaned from IG’s investigation of LIPA.

⁵³ Long Island Power Authority, Frequently Asked Questions – Change in Energy Delivery Methodology (2011).

distribution. In order to recover costs associated with these line losses, like other utilities, LIPA adjusts the price applied to the electricity units charged to customers through an adjustment of the Power Supply Charge. In particular, LIPA estimates a “line loss factor” indicating the percent of the electricity purchased by LIPA from the generating companies that is lost during transmission and distribution. The line loss factor is then converted mathematically to a “factor of adjustment” that is applied to customer energy usage to estimate the amount of line losses/L&U in units of kWh. Then, costs are assigned to these line losses and recovered from customers through the Power Supply Charge.⁵⁴

In response to the IG’s review, LIPA management explained that the percentage of its purchased electricity projected to have been lost in transmission and distribution had in fact been too high. Specifically, LIPA had assumed an annual percentage of 6.8% to calculate its line losses from 1998 through December 2009. However, the actual average annual line loss percentage experienced by LIPA’s system ranged from 5.6% to 6.9% between 2003 and 2009. LIPA management reported to the IG the annual line loss percentage that was actually experienced by LIPA’s system in each of the years from 2003 to 2009 (see Figure 1).⁵⁵

Figure 1: Actual Line Loss Experienced by LIPA from 2003-2009

<u>Retrospective Summary of Actual Line Loss Observed</u>	
A review of 12-month system requirements compared to the same 12-month period billed sales supports the need to more frequently update the loss factor included in LIPA's revenue requirement calculation.	
Actual Average Line Loss Observed (system requirements without line losses compared to 12 months billed sales)	
2003	5.720%
2004	6.930%
2005	6.200%
2006	5.560%
2007	6.730%
2008	6.200%
2009	6.280%
* NGRID did not maintain system requirement data prior to 2003.	

Since identifying the \$231 million error, LIPA has instituted a new methodology to rectify the problem of using lower than actual revenue figures. In January 2011, LIPA requested its Trustees approve a resolution to revise the manner in which it adjusted its Power Supply Charge by changing the way LIPA measures “unbilled energy deliveries.” Unbilled energy deliveries are the estimated amount of energy that LIPA customers already have consumed but due to billing schedules, among other things, have not yet been billed to its

⁵⁴ The conversion between the line loss factor and the factor of adjustment is required because the line loss factor and the factor of adjustment reflect the percentage electricity losses relative to Electric System Requirement and customer energy usage, respectively. LIPA’s line loss factor is based on an Electric System Requirement that excludes company and franchise energy usage from the total Electric System Requirement.

⁵⁵ The average actual line loss factor is for the period between 2003 and 2009. LIPA explained that data on the actual line loss factor was not available prior to 2003 because National Grid did not retain the data.

customers.⁵⁶ In particular, LIPA sought its Trustees' permission for the new methodology to be effective beginning January 2010. While the new methodology appears to address the problem of using lower than actual revenue figures when adjusting the Power Supply Charge, it still does not ensure customers are paying only for accurately measured line losses.

The New Methodology Does Not Ensure Customers Are Paying Only for Accurately Measured Line Losses

Although the new methodology allows LIPA to true-up the forecasted sales with actual sales, even assuming the Accrued Unbilled Sales continues to be close to 100% accurate, the new methodology does not ensure customers are paying only for accurately measured line losses. The reason for this lack of certainty is that line loss represents the difference between electricity generated at the power plants and purchased by LIPA and the level of consumer energy usage indicated on the customer meters. The estimate of how much the forecasted Power Supply Charge needs to be adjusted is determined by the difference between the actual costs and revenues, and not just the actual revenue alone. The actual costs are based on the actual payments LIPA made to entities from which LIPA purchased energy.

In order to be consistent with industry best practices, tests of line losses should be periodically performed at different voltage levels to properly allocate the costs to customers. The results of such tests are usually presented in a rate proceeding and are converted into a "Factor of Adjustment" that is applied to metered sales so that the utility can recover these costs. The actual collections of "Lost and Unaccounted" sales to the forecasted amount are not reconciled at public utilities, but as noted are periodically reset in rate proceedings. LIPA, like other utilities, does have a factor of adjustment that charges customers for line losses. This was previously set at 6.8% (the national average) and recently lowered to 6.6%. However, the IG verified that LIPA's system average to be a 6.2% line loss factor. In light of this finding, LIPA should lower the assumed line loss amount that is billed to customers. Even though discrepancies are eventually "trued-up" and reconciled on monthly billing statements, using this higher than necessary factor could result in the temporary over collection of up to \$15.4 million per year.

LIPA's Explanation as to Why it's Methodology Was Faulty

According to LIPA, the discovery of the faulty methodology was triggered by questionable trends in its unbilled revenue account and its L&U account balance over the years. In requesting that its Trustees approve a resolution to revise its faulty methodology, LIPA stated that revisions were necessary because LIPA had discovered that the L&U account balance had been escalating disproportionately. In addition, LIPA specifically explained that the "drivers that led to the L&U account balance anomaly are: (1) the Factor of Adjustment was higher than what was actually being experienced on the system, and as a result the L&U balances were not being properly reversed and reset, and (2) the L&U balance was not being priced accurately." The IG and the Commission concur.

LIPA Instituted a Plan to Use the \$231 million to Benefit Customers

In January 2011, the Trustees approved a three-year plan to return \$129 million of the estimated \$231 million error related to line loss to its customers through a reduction in its Power Supply Charge and allowed LIPA to apply \$30 million of the line loss overcharge to reduce an outstanding acquisition adjustment and then to apply the remaining \$72 million to its reserve account. Specifically, the Trustees approved the following

⁵⁶ Information gleaned from IG's investigation of LIPA.

distribution of the \$231 million in unrecognized revenue (see Figure 2 below)⁵⁷ over a three-year reimbursement cycle.

Figure 2: Balance Sheet Impact (in Millions) of LIPA's Distribution of \$231 Million Error

Eliminate L&U Reserve	- \$231
Increase Regulatory Liability – Excess Fuel Recovery	\$129
Reduce Value of Acquisition Adjustment	\$30
Increase Net Asset	\$72

At the issuance of this report, LIPA is two and a half years into the \$129 million three-year ratepayer reimbursement cycle. Therefore, the Moreland Commission investigated whether or not \$129 million of the \$231 million overcharge was properly credited back to customers, via their bills. In order to determine this, the Commission not only sought to verify the reimbursement to customers on LIPA’s journal entries and applicable tariff statements, but also where it appears on a customer’s bill. The Commission found that various legal and accounting analyses by internal personnel and external consultants were performed that verified LIPA’s plan to refund \$56 million in 2011, \$36.5 million in 2012 and the remaining \$36.5 million in 2013. The Commission staff reviewed and tested tariff statements during the period to verify that the target annual refund amount was being included as a credit.⁵⁸ The Commission also reviewed journal entries, trial balances and the annual statements. Based upon the Commission’s due diligence, it is determined that LIPA has applied \$30 million to offset the acquisition adjustment, \$72 million to retained earnings, and appears to be within one year of completing the remaining balance reimbursement of \$129 million to its ratepayers.

3.4 CONCLUSION

In sum, the issues highlighted above point to a pattern of financial irregularities and improper accounting methodologies that raise significant questions about the accuracy and reliability of LIPA’s financial reporting. Under LIPA’s present management structure, these deficiencies persist, unchecked by internal or external auditing—indeed, in its audit reports accompanying LIPA’s 2011A bond statements, KPMG twice confirmed that its audits of LIPA revealed no material misstatements or deficiencies.⁵⁹ This apparent disconnect—between the questionable accounting practices uncovered by the IG and the Commission and LIPA’s ongoing public representations that it is in compliance with acceptable accounting practices⁶⁰— is yet another indication that the current LIPA management structure is broken.

⁵⁷ Information gleaned from IG’s investigation of LIPA.

⁵⁸ For example, tariffs 25 and 26, which were in effect from April 1 to December 31, 2011, included a refund credit of about 0.4 cents per Kwh on monthly power supply charges billed to customers. These monthly power supply charges net of the refund credit shown on the tariffs were traced to actual customer bills. Actual refunds through March 31, 2013 were about \$101 million and the remaining \$28 was expected to be refunded by the end of 2013.

⁵⁹ See Appendix 8.9 Mar. 31, 2011 KPMG Independent Auditors’ Report (“In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of December 31, 2010 and 2009[.]”. See also Appendix 8.10 Mar. 31, 2010 Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards* (“We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses”).

⁶⁰ Long Island Power Authority, Electricity System General Revenue Bonds-Series 2011A (September 15, 2011).

POLICY FINDINGS AND RECOMMENDATIONS

The Commission's Interim Report stated that for the Final Report the Commission would examine the challenges associated with managing the costs of storm hardening activities, as well as identify improvements in PSC and the Department of Public Service's (DPS's) management and public involvement to better serve the ratepayer's interests. The following sections address these items in addition to building on the Interim's Report's preliminary review of the State's energy efficiency programs and activities.

4 ANALYSIS OF ENERGY EFFICIENCY PROGRAMS

Energy efficiency is the lowest cost way for New Yorkers to meet their electric needs. Recognizing this, the State has in recent years been ranked in the top three nationally in the provision of energy efficiency services.⁶¹ Nevertheless, the Commission has found that New York could – for the money that it is spending – do much better in providing these vital services.

As stated in the Interim Report, the Commission has further examined the overlap of energy efficiency initiatives such as the EEPS programs that are authorized by the PSC and administered via NYSEDA and the State's six IOUs. EEPS is a ratepayer-funded statewide program that began in 2008 to reduce New York's electricity usage by 15% of forecasted levels by 2015. EEPS is authorized by the State to collect ratepayer surcharges totaling \$3.1 billion for programs offered from 2008 through 2015. To date it has collected over \$1.2 billion. EEPS is intended to support a variety of programs that provide incentives to New Yorkers for installing energy efficient equipment and measures. The Commission's goal was to determine if the overlap of a state agency and the private sector that partially competed for the same market was efficient and if the oversight by the PSC of a sister agency and the IOUs was appropriately applied.

The Commission began examining the energy efficiency program by identifying and interviewing external stakeholders: organizations or individuals that are consumers, representatives of consumers, implementing contractors, and policy experts from associations, not-for-profits and academia. The Commission also interviewed internal stakeholders - which were either agency or IOU staff charged with implementing the programs on behalf of consumers or those charged with regulatory oversight. Once the Commission concluded that the competition between NYSEDA and the IOU's was inefficient, it concluded that it needed to make a recommendation to address the inefficiencies. In order to do this, the Commission sought to examine the performance of NYSEDA and the IOUs on an EEPS program by program basis, an IOU to IOU basis and a NYSEDA to IOU basis. The Commission's goal was to use the data requested to guide it towards a recommendation. Only after the Commission asked for the data to compare program to program and IOUs to IOUs and NYSEDA to IOUs did the Commission learn that no such comparable data exists. Furthermore, the Commission learned that the entire mandatory reporting required by the PSC is only intended to measure the first year savings of EEPS programs rather than year after year savings. So the Commission was not only unable to determine the more efficient provider, but also unable to ascertain the presumed long-term benefits and savings.

⁶¹ New York ranked third in the American Council for an Energy Efficient Economy's Energy Efficiency Scorecard Report in 2011 and 2012. American Council for an Energy Efficient Economy website, <http://aceee.org/sector/state-policy/scorecard> (last accessed 6/19/2013).

4.1 COMPETITION OF PROGRAM ADMINISTRATORS

Both NYSERDA and the IOUs are the program administrators for EEPS – they offer various programs to New Yorkers across all sectors (i.e., residential, multi-family, commercial, and industrial) in accordance with the rules set forth by the PSC. Other than NYSERDA providing EEPS programs to low-income communities and new construction programs exclusively, there is no bright line distinction between the NYSERDA and IOU programs. For example, NYSERDA implements EEPS through its Home Performance with ENERGY STAR® program, working with certified contractors, selected by homeowners, who come into homes, perform an energy audit, recommend and offer to install measures that will improve the home’s overall energy efficiency. In turn, NYSERDA provides incentives both to the contractors that perform the audit and install the eligible measures, and to the homeowners to help offset the cost of the more energy efficient equipment such as insulation, furnaces, air conditioners, air sealing, refrigerators and light bulbs. The IOUs target the same customers for their programs; however, more often they provide rebates for single measures, rather than taking a comprehensive approach to analyzing the customer’s building.

One of the primary issues raised by the stakeholders was the competing energy efficiency programs offered by NYSERDA and the utilities under EEPS. Market competition typically benefits consumers – providing greater choices for goods and services and driving innovation, higher quality and lower prices. However, this is not the case when it comes to administration of EEPS. Nineteen of the twenty-five stakeholders agreed that this competition creates confusion in the marketplace (only two stakeholders supported this competition; the remaining four stakeholders didn’t express an opinion). Furthermore, a number of stakeholders noted that when customers are confused about how the programs offered to them differ or how to evaluate which program is most appropriate for their needs, they tend to back away from the programs and not pursue any offering. Exacerbating customer confusion is the number of EEPS programs – over 100 – each with different rules, applications and processes for participation. Competition between the IOUs and NYSERDA also prevents DPS and NYSERDA from working collaboratively because there is sensitivity at DPS to avoiding the appearance of giving NYSERDA an advantage over the other EEPS program administrators.

Under the current EEPS construct, both NYSERDA and the utility program administrators have program budgets and energy savings targets. There are currently no penalties to program administrators who fall short of their assigned targets, though the utility program administrators receive shareholder incentives for meeting their energy savings targets.⁶² While this practice may motivate the utilities to hit their targets, it may not necessarily encourage them to do so at the lowest cost because the funding for the programs does not come from the utilities’ pockets, but rather the ratepayers they serve. Because the utilities are competing for the same customers as the NYSERDA programs and customers are generally attracted to greater incentives, the utilities may be driven to offer greater incentives to attract customers to their programs and increase the likelihood of receiving shareholder incentives. This practice increases the cost to the collective ratepayers that fund the EEPS program through a surcharge on their utility bill.

DPS acknowledged that while utility shareholder incentives have been somewhat effective in motivating utilities to pursue energy efficiency, there are also indications that they are “driving utilities toward behavior

⁶² Utility program administrators had the potential for penalties and positive incentives in the first phase of EEPS (2008 to 2011). The PSC, however, eliminated penalties for the second phase of EEPS (2012 to 2015). NYSERDA, as a public benefit corporation, does not receive financial incentives for meeting its EEPS program targets.

that is counterproductive to the overall goals of the program.”⁶³ To date no incentives have been approved for distribution to the utilities and according to DPS staff interviews, the Commission was advised that not enough money has been collected to cover those incentive costs. Therefore it is likely that, absent cutting other EEPS program funding to cover these costs, EEPS collections may well have to increase to cover the shareholder incentives, potentially as much as \$27 million for the energy savings produced by the utility programs during the 2008 to 2011 timeframe.⁶⁴

4.1.1 APPROACHES FOR ELIMINATING PROGRAM OVERLAP

Elimination of customer confusion and energy efficiency program overlaps through consolidation of programs and a clear delineation of roles and responsibilities between NYSERDA and the utilities is a straightforward way to resolve this issue of duplication. However, the specific roles that NYSERDA and the utilities should play are not very clear. A variety of approaches were presented by the stakeholders interviewed as part of the Commission’s investigation, including having the utilities and NYSERDA both remain involved in all markets, but offering different options of the same programs; dividing the energy efficiency market up between the utilities and NYSERDA based on upstream/downstream markets; dividing the energy efficiency market up between the utilities and NYSERDA based on customer sector; or having a single administrator to run all programs either statewide or in a given region of the State. These approaches are discussed in detail below.⁶⁵

Approach 1: Division by Type of Program Offering

Five of the stakeholders interviewed suggested divisions of EEPS responsibilities by program type; having the utilities offer rebate programs for a limited number of simple measures and having NYSERDA offer more complex, whole-building programs. This could involve a unified outreach and marketing campaign to reduce customer confusion and help direct customers to NYSERDA or the utility program that best suits their needs. The utility rebate programs could be used as a feeder program to NYSERDA’s comprehensive programs.

This approach would take advantage of the program administrators’ strengths.⁶⁶ By having distinct programs, NYSERDA and the utilities could jointly market the programs and send potential participants to their utility for single- or few- measure, simple projects, such as appliance and lighting replacements and installation of programmable thermostats, and to NYSERDA for whole building projects, including building integrated systems like heating and air conditioning, for example. However, additional elimination or consolidation of some programs would still be necessary in order to reduce customer confusion.

Approach 2: Division by Upstream/Downstream Markets

Four stakeholders suggested a variation of the market sector division, asserting that the IOUs should deliver all programs to their actual ratepayers because they understand their ratepayers/customers’ needs and already have a relationship with them. Those stakeholders suggested that NYSERDA was best positioned for

⁶³ Energy Efficiency Portfolio Standard Program Review White Paper, Case 07-M-0548 Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, prepared by Department of Public Service Staff, at 57 (July 6, 2011).

⁶⁴ New York State Public Service Commission, Order Concerning Utility Financial Incentives, Case 07-M-0548 Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, at 45 (August 22, 2008).

⁶⁵ Any of the approaches pursued must be done in a manner that considers potential disruption to the program participants, including customers and various program support contractors.

⁶⁶ A number of interviewees mentioned the utilities’ strength in rapidly processing high volumes of rebates and NYSERDA’s history of providing strong comprehensive, custom programs.

“market transformation” programs, which include “upstream” activities to help get energy efficient products into the marketplace, educating consumers on the benefits of energy efficiency, and working with State economic development organizations. For example, the IOUs would provide energy efficiency audits and installations to all ratepayers in their jurisdiction – including residential, commercial, and industrial – and NYSERDA would work with the retail stores on marketing energy efficient appliances and customer education. There are several potential downsides to this division of markets, including: (1) a lack of continuity with regard to NYSERDA’s nearly exclusive role in serving the low-income and new construction sectors; (2) an inconsistency with NYSERDA’s statutorily prescribed role to offer free energy audits and on-bill financing through the Green Jobs Green New York Program (GJGNY); and (3) the loss of the ability to use complementary NYSERDA funding sources to provide oil and propane efficiency measures through the Regional Greenhouse Gas Initiative (RGGI). RGGI funds support residential and multifamily oil efficiency programs than can complement projects that involve electric efficiency measures under EEPS. If NYSERDA were not involved in the EEPS programs, it would be imperative that a way be found to use multiple funding sources to create comprehensive projects.

Approach 3: Division by Customer Sector

Three stakeholders suggested division of EEPS responsibilities by customer sector. This would involve reviewing the programs currently offered and determining which entity is best suited to delivering to the program’s target sector. This could result in division of responsibilities by market (i.e., residential, commercial, and industrial) or by customer size (or another attribute) within markets. For example, NYSERDA could provide EEPS to commercial and industrial over 50,000 square feet while the IOUs would provide it to all customers fewer than 50,000 square feet. Conversely, NYSERDA would service commercial and industrial customers statewide, while the IOUs would service all residential properties within their jurisdictions.

However, this approach is complicated by the fact that NYSERDA offers other programs funded by the System Benefits Charge (SBC), GJGNY, RGGI, and Renewable Portfolio Standard (RPS) to all or many customer sectors.

Approach 4: Single Administrator

Two stakeholders suggested there should be a sole statewide program administrator and that NYSERDA would be best suited for that role. In this scenario, NYSERDA would run all EEPS programs statewide, as they currently do with the RPS programs, and the utilities could partner with NYSERDA to do outreach and marketing for the programs. Having a single administrator for energy efficiency and renewables programs could help streamline delivery of the programs and ensure statewide programmatic consistency, which might aid in marketing and customer uptake. This approach would likely require additional resources for NYSERDA, thereby increasing enrollment in the State employee pension and benefit system. The utilities might also be reluctant to assist in the marketing of the programs absent the potential for utility shareholder incentives.⁶⁷

⁶⁷ With regard to utility shareholder incentives, the PSC’s August 22, 2008 Order Concerning Utility Financial Incentives stated that “positive incentives, in addition to revenue decoupling mechanisms, may be desirable to increase utilities’ promotion of efficiency, where the utilities are directly engaged in program administration.” New York State Public Service Commission, Order Concerning Utility Financial Incentives, Case 07-M-0548 Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard, at 45 (August 22, 2008). In addition, the PSC’s October 25, 2011, Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge Schedule affirmed “without question the incentives have made successful efficiency measures a high priority for utility management.” It is unclear how high a priority the utilities would make marketing of EEPS programs in the absence of shareholder

4.1.2 ISSUES IDENTIFIED DURING PROGRAM OVERLAP ANALYSIS

In its attempt to evaluate the various approaches suggested by the stakeholders, the Commission sought to analyze the program administrators' current program performance. The Commission found that:

- Direct program comparisons are not possible – No life-cycle savings data is collected to allow for cost effectiveness comparisons on a cost per unit energy savings basis or program by program, NYSERDA versus the IOUs, or IOU by IOU.
- DPS does not have one central database to house the data collected from NYSERDA and the IOUs.
- Shareholder incentives may be increasing the cost of achieving energy efficiency savings in New York without being properly counted in assessing cost effectiveness.

Lack of Data to Make Program Comparisons

As indicated earlier, comparison of EEPS programs is difficult because the programs are not uniform between NYSERDA and the utilities, or even across utilities. For instance, as shown in Figure 3 below, in just the residential sector there are four different types of programs: behavioral; bounty; comprehensive; and rebate. Behavioral programs are intended to encourage efficiency through information related to the consumer's energy use, often compared to those in similar homes. Bounty programs provide funding to consumers who surrender inefficient appliances. Comprehensive programs analyze the efficiency of a home in total and suggest a range of interacting measures to improve the home's overall efficiency. Rebate programs provide an incentive to cover a portion of the incremental cost of efficiency equipment, appliances and measures. Even within a single program type, the programs offer different incentives for different measures.

Compounding the difficulty in comparing program administrator performance, particularly on a cost per unit of energy savings, is that the program performance data collected by DPS on a monthly basis from each program administrator includes only savings for the first year of the program measures' operation.⁶⁸ In simple terms, you could have a program that funds inexpensive measures with a shorter life cycle being compared with a program that funds more expensive measures that might last decades. If the measures in the two programs provide the same energy savings in the first year, the program with the less expensive measures intended to only last a few years would appear to be a more cost effective program (on a cost per unit savings basis), when in actuality, it may not be because those measures would need to be replaced every few years. This is at least partially a result of how EEPS was initially structured around the '15 by 15' goal to reduce the State's electricity use by 15% below 2015 forecast levels. Because the goal is related to energy use at a particular point in time (i.e., 2015) and the majority of installed measures had a lifetime that extended into 2015, the sum of the first year savings from all EEPS program was sufficient for measuring progress toward attaining the 2015 goal.

incentives. New York State Public Service Commission, Order Authorizing Efficiency Programs, Revising Incentive Mechanism, and Establishing a Surcharge Schedule, Case 07-M-0548, Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard (October 25, 2011).

⁶⁸ There are also other considerations that need to be included in such an analysis, including health, safety, and environmental factors, the benefits of which can be difficult to quantify. Customer equity should also be considered so that every customer that pays into EEPS via the surcharge on their utility bill also has programs available to participate in.

Figure 3: EEPS Residential Electric Programs

Program	2008 - 2015 EEPS Electric Budget	Sum of Total EEPS MWh Target	Sum of Total EEPS \$ Budget / MWh Target
<u>Behavioral</u>			
Central Hudson Home Energy Reporting	\$4,220,027	54,000	\$78
NiMo Residential Building Practices and Demonstration	\$3,697,437	68,040	\$54
NYSEG Home Energy Reports Demonstration Program	\$789,280	16,051	\$49
RG&E Home Energy Reports Demonstration Program	\$698,948	13,949	\$50
<u>Bounty</u>			
Central Hudson Residential Appliance Recycling Program	\$5,565,727	12,188	\$457
Con Edison Appliance Bounty Program	\$23,842,141	68,393	\$349
NiMo Residential Energy Star Products and Recycling	\$15,135,000	36,166	\$418
NYSEG Refrigerator and Freezer Recycling Program	\$6,842,105	21,805	\$314
O&R Residential Efficient Products Program	\$3,972,977	10,599	\$375
RG&E Refrigerator and Freezer Recycling Program	\$6,842,105	21,805	\$314
<u>Comprehensive</u>			
NYSERDA Home Performance with Energy Star	\$22,321,822	36,484	\$612
NYSERDA NY Energy Star Homes	\$8,501,849	25,148	\$338
<u>Rebate</u>			
Central Hudson Residential HVAC Program	\$5,999,886	5,526	\$1,086
Con Edison Residential Direct Installation Program	\$15,883,713	28,493	\$557
Con Edison Residential HVAC Program	\$26,731,475	11,928	\$2,241
Con Edison Residential Room Air Conditioning Program	\$7,942,072	6,602	\$1,203
NiMo Enhanced Home Sealing Incentives Program	<u>\$6,993,600</u>	<u>11,848</u>	<u>\$590</u>
Grand Total	\$165,980,164	449,025	\$370

The Commission finds the lack of a metric to allow comparison of EEPS programs or program administrators particularly disconcerting considering the competition model embedded into the design of EEPS. The Commission is troubled by this discovery. Without exception, NYSERDA and the IOUs voiced concern about how time-consuming the monthly reporting requirements are and the failure to collect necessary information has been ongoing without remedy since the inception of EEPS. So despite the stringent and exhaustive reporting requirements, DPS is not able to present clear and convincing performance comparison of the program administrators across the energy efficiency programs currently being offered in New York State. This further begs the question how the PSC plans on measuring the long-term energy savings from a program that is authorized to collect over \$2 billion from ratepayers. Adding insult to injury, the Commission learned that there are known inaccuracies in some of the data provided by certain program administrators, so the quality of the data provided to DPS is compromised as well.⁶⁹ The lack of reliable data also reduces the ability of program administrators to review the incentive levels themselves – many energy efficiency measures should pay for themselves, so it is important to understand whether the incentive itself is the best vehicle to achieve the energy reduction goal. This situation could certainly have been avoided had the DPS put in place

⁶⁹ DPS staff acknowledges this as an issue and stated they are working to obtain corrected data dating to 2011 from one program administrator.

internal controls to track programs and quickly identify trends and anomalies and question data. Yet, when asked what documents the Commission should review to offer recommendations on creating efficiencies in the evaluative process, DPS staff acknowledged no single repository or report currently exists that would allow an “apples to apples” comparison.

Lack of a Central Database

Numerous stakeholders explained the immediate need for a comprehensive and standardized program tracking database that would allow NYSERDA and the IOUs to input predetermined data into a group shared information technology (IT) application. California currently uses this type of model with its Energy Efficiency Groupware Application, Database for Energy Efficiency Resources and Standard Program Tracking database in its measure reporting and evaluation process.⁷⁰ The fact no such IT platform exists at the DPS compounds the concern that the agency spent years collecting EEPS data, yet no single report can be produced which yields constructive or interpretative analysis of programs and program administrators. A shared IT platform could also be a vehicle to address the lack of customer information sharing between the utilities and NYSERDA. The current barrier to customer information sharing prevents the full potential benefit of the energy efficiency programs from being realized. Utility sharing of customer usage information with NYSERDA would facilitate market analysis and evaluation of programs, while NYSERDA sharing of clean energy program participant information with the utilities would support utility resource planning efforts.

Shareholder Incentives

Related to program comparisons is the concept of utility shareholder incentives for meeting program targets. These costs must be included in a comparison of program cost effectiveness.

4.1.3 DISCUSSION OF PROGRAM OVERLAP RECOMMENDATIONS

Steps must be taken to eliminate and consolidate programs and reduce overlap and competition among NYSERDA and the IOUs. Given the challenge to do so absent empirical data on program performance, the Commission recommends maintaining involvement of both the utilities and NYSERDA, while establishing some lines of demarcation. The Commission believes that division by customer sector, as discussed in section 4.1.1 as Approach 3, with the IOUs serving lower energy use customers (residential and small commercial and industrial) and NYSERDA serving high-energy use customers (large commercial and industrial), would provide the greatest clarity.

However, given the complexity of the EEPS program, the Commission believes it is necessary to bring in a consultant to review this approach and work out the structural details. Furthermore, as detailed above, the lack of appropriate data and the disparity between all the programs prevents the Commission from comparing which of the 100 programs actually best serves the public interest and whether NYSERDA or the IOUs or a particular IOU administers the EEPS program more efficiently. This lack of targeted data has prevented the Commission from providing a detailed recommendation as to program administration. Continuation of the present EEPS program virtually guarantees that many opportunities to do vital energy efficiency will be lost. What is needed now is a program under a skilled independent management consultant first to design and gather comprehensive cost-effectiveness data and then to recommend a division of jurisdictions among the utilities, NYSERDA and the PSC.

⁷⁰ California Public Utilities Commission's Energy Efficiency Groupware Application, <http://eega.cpuc.ca.gov> (last accessed 6/19/2013), The Database for Energy Efficient Resources, <http://www.energy.ca.gov/deer> (last accessed 6/19/13).

The PSC should also provide authorization for NYSERDA to use EEPS funding to begin the development of an enhanced IT platform to assist in sharing customer information between program administrators which will increase the efficiency and effectiveness of programs. In addition, issues regarding sharing of customer information between NYSERDA and the utilities should be resolved to maximize the benefits and allow for more effective implementation of New York's clean energy programs. Consideration should also be given to how such data could be used in the marketplace to deliver additional products and services to customers to reduce energy use and reduce energy costs. The Commission is sensitive to the customers' right to privacy; however, it is incumbent upon the PSC to create an environment that optimizes use of ratepayer funds in the administration of clean energy programs.

Recommendations:

- **The PSC should eliminate and consolidate programs and divide the EEPS portfolio between NYSERDA and the utilities, using a consultant to offer recommendations on the most appropriate structure.**
- **The PSC should immediately commence development of a comprehensive IT platform that NYSERDA shall manage (using the California system as a model) to track and evaluate EEPS programs, including taking all necessary steps to remove the current barriers to sharing customer information between NYSERDA and the utilities.**

4.2 LEVEL OF DPS/PSC OVERSIGHT

As the PSC authorizes use of ratepayer funds to support the State's energy efficiency programs, it is also responsible for monitoring the funds to ensure they are being used appropriately and are resulting in the intended benefits. To this end, DPS is deeply involved in the day-to-day details of the programs. On the program administration end, this includes details such as approval of specific measures allowed in the various EEPS programs. On the program evaluation end, it includes review of all draft materials from the evaluation contractors that NYSERDA and the utilities manage in the evaluation of their own programs. Several PSC orders also contain very detailed information regarding what is or is not to be included in specific programs.

It is understandable that DPS/PSC increased its level of involvement in the management of New York's clean energy programs over time. The State's original SBC ratepayer-funded technology and market development programs began in the late 1990s at less than \$100 million annually. The SBC program grew to more than double that annual funding amount over the next decade, when the RPS was also established. By the time EEPS was put into place in 2008, ratepayer collections for clean energy programs had grown substantially. It was also at this point that the utilities, which had been largely out of the administration of the State's clean energy programs, were brought into a program administration role with EEPS. As a result, the PSC determined that more oversight of EEPS (as compared to SBC and RPS) was necessary. While the PSC's intent was to be a responsible steward of the exponentially growing EEPS funding, it did so by directing DPS staff to undertake functions better left to NYSERDA and the IOUs rather than focusing on ensuring that policy and evaluative criteria were being met.

Operationally, this detailed involvement and oversight has presented some issues. The staff in the Office of Energy Efficiency and Environment (OEEE) at DPS spends substantial time and resources attempting to manage nearly all aspects of EEPS program administration. This results in a significant lack of flexibility for program administrators to make real time decisions to modify programs or funding in order to increase program effectiveness and efficiency. Many of the stakeholders interviewed commented that DPS staff

resources are insufficient for the current level of oversight, which can be evidenced by some petitions for EEPS program changes languishing unaddressed for months and in some cases over a year. Many interviewees expressed the level of DPS oversight is too focused on the details of the programs at the expense of other important policy issues, such as tracking overall program progress and establishing guidance as how to apply evaluation results. As mentioned in the previous section, despite the volumes of data required of program administrators, there is an apparent failure of DPS to analyze that data, send timely signals to the program administrators for program adjustments based on the performance to date, or identify best practices and areas for efficiencies and collaboration among program administrators.

An example of this misdirected attention to detail that came up frequently in the stakeholder interviews is related to the Total Resource Cost (TRC) test. The TRC is a cost effectiveness test that measures the benefit of energy efficiency compared to the total cost (of the program administrator plus consumer) of the energy efficiency measures. DPS has chosen to apply the TRC at the measure level, meaning that in order for a measure to be incentivized in an EEPS program, the benefits of reduced energy consumption must outweigh the installed cost of the individual measure. The logic is that by making sure every measure in a given project is cost effective, the entire project and program as a whole will also be cost effective. There was general consensus among the stakeholders interviewed that the current application of the TRC at the measure level, while ensuring the EEPS portfolio of programs is cost effective, is too conservative and leaves some potential savings on the table. One program administrator gave an example of this in practice, saying that after installing insulation in a home, they sometimes have not been able to air seal the home because air sealing did not pass the TRC on its own. Generally, interviewees suggested a move towards application of the TRC at the program level would be more appropriate, allowing some measures that may not individually pass the TRC to be incentivized as long as the program passes the TRC. Another potential option is to switch to an alternative cost effectiveness test altogether, such as the Program Administrator Cost Test.

Recommendation:

- **Redirect the level of PSC/DPS oversight to allow programs to be more nimble and have the flexibility to adjust and respond to the market. Specifically, the PSC should:**
 - **Set clear savings targets and budgets in consultation with NYSERDA, the IOUs and other entities based on market studies or other relevant information;**
 - **Delegate authority to DPS staff to develop, maintain and revise program guidance with the assistance of NYSERDA, in consultation with the IOUs; and**
 - **Collect only pertinent information and appropriately use that information to guide the program administrators and increase transparency.**

5 UTILITY INFRASTRUCTURE INVESTMENT

5.1 NEED FOR BETTER RESILIENCY

The Recent Storms impacting New York State, most notably Hurricane Sandy, made it evident that utility infrastructure and the customers served by it are vulnerable during extreme weather events. In fact, a recent storm surge report suggested that in the residential sector alone, New York State has approximately 270,000 properties potentially at risk of hurricane-driven storm surge damage with a total potential financial

exposure of nearly \$135 billion.⁷¹ As a result, the Commission believes it is necessary that utilities harden their systems by investing in infrastructure specifically designed to be more resilient. While this will be a costly endeavor amounting to billions of investment dollars statewide, it is nonetheless prudent in light of the concomitant human and economic losses experienced during the recent storm events.⁷² Just as a guardrail at the top of a mountain can prevent the need for ambulances below, investments made to reduce storm damage will also reduce utilities' restoration costs and times in future storms.

Utilities continuously replace and upgrade their infrastructure in order to adequately serve existing and projected customer loads and to maintain or improve system reliability and service quality. While these activities generally improve the overall quality of the system (provided the remainder of the system is not aging at a faster rate), they fall short of what is needed to advance the system to a new level that would be capable of resisting the impacts of severe weather events. To obtain a more resilient infrastructure the utilities need to rethink and revise their design standards, particularly with respect to flood level potentials, critical equipment location, and material type and size. For example, when existing circuits are rebuilt and equipment replaced, rather than simply replacing in kind and at code minimums, utilities should assess the benefits of using stronger and more storm resilient components and equipment. The utilities should interact with other out-of-state industry members to identify alternative design criteria being used, their effectiveness, and their applicability to New York. The Commission also believes that utilities should determine areas where selective undergrounding of infrastructure would be appropriate.⁷³ As these hardening efforts are planned, it is vital that the utilities and the municipalities they serve work in a cooperative manner to minimize permitting delays, enable right-of-way acquisitions and support vegetation management programs.

Because of the need to balance the incremental costs and rate impact associated with a more resilient design, the utilities should also develop a strategy that targets maintaining service to critical infrastructure in their respective communities.⁷⁴ In addition to design changes, the utilities will need to modify cost/benefit analyses used to evaluate if funding a project is worthwhile in their future capital programs. The Recent Storms indicate that current risk assessment processes need to be redefined to account for the potential increase in the number of storms occurring, their size, and their destructive power. The risk assessments should not only account for impacts to the utilities' own infrastructure, but the overall impact to the affected region.

⁷¹ Matt Chaban, *NY faces greatest storm surge threat, report says*, Crain's New York Business, May 31, 2013, available at http://www.craigslist.com/article/20130531/REAL_ESTATE/130539982 (last accessed 6/19/2013) (citing the Core Logic, Storm Surge Report from 2013).

⁷² Estimating the total cost of hardening efforts statewide requires defining what would be an acceptable level of interruptions during various storms, followed by an engineering analysis by each of the utilities. However, the Commission is aware that post-Sandy, Con Edison has filed a hardening plan to invest \$1 billion over four years, with over \$700M allocated to improving its electric system (excluding generation) and in 2006 LIPA indicated a \$500 million hardening plan that would be completed over 20 years.

⁷³ Following any serious interruption of electric service, there is customarily an acute public interest in undergrounding all power lines. The significant cost to underground the infrastructure (estimated to be as high as \$4 million per mile) may not be a viable option in certain utility service areas given the initial costs to be borne by customers and the potential ongoing impact to ratepayers' bills.

⁷⁴ In March 2009, Quanta Technology prepared a report for the Public Utility Commission of Texas that contains, among other things, a list of considerations for analyzing targeted storm hardening projects that could prove useful to New York utilities. Quanta Technology, *Cost-Benefit Analysis of the Deployment of Utility Infrastructure Upgrades and Storm Hardening Programs* (Mar. 4, 2009), available at http://www.puc.texas.gov/industry/electric/reports/infra/Utility_Infrastructure_Upgrades_rpt.pdf (last accessed 6/19/2013).

Following Hurricane Sandy, several projects have been proposed or are currently underway to harden the system. Many of these projects focus on reinforcing substations and other components located along the coast to be capable of withstanding sizable storm surges or improving the utilities' ability to restore customers. Such project investments include one-time efforts to modify existing infrastructure by relocating critical equipment to higher locations, constructing larger flood barriers, and adding better waterproofing materials. While coastal flooding risks are readily known from Sea, Lake and Overland Surges from Hurricanes (SLOSH) model maps, similar easy-to-use information regarding the effects of various floodwater heights does not exist.⁷⁵ The Commission believes that such information should be developed, under the guidance of NYS Division of Homeland Security and Emergency Services, for the major waterways within New York. By doing so, utilities and emergency preparedness groups will be able to work off of a common platform to design appropriate mitigation and response plans. An example that could provide some guidance is the Florida Division of Emergency Management's interactive mapping tool that provides a plethora of relevant information for residents and emergency responders.⁷⁶ One useful feature of this tool is that residents can input their addresses and view flood zone, storm surge zone and evacuation zone information for their homes.

Given the large number of assets comprising a utility system, many other improvement efforts consist of multiple projects under a long-term program. The Commission believes that as a starting point, the utilities should perform a health assessment for each of its asset classes (poles, transformers, etc.). This information could then be used to define and prioritize hardening programs and maximize the effectiveness of initial capital investments. The Commission believes this approach combined with new design criteria for hardening key components will better position New York during future storm events.

Recommendations:

- **The NYS Division of Homeland Security and Emergency Services should coordinate the development of flood maps for the major waterways within New York State.**
- **The PSC should direct the six investor-owned utilities to file an Asset Health Report for all of its major asset classes to be used in prioritizing and maximizing the effectiveness of the utilities' capital expenditure filings. LIPA should also be required to conduct a comparable asset health assessment.**

5.2 IMPROVING INFRASTRUCTURE UNDER A COST CONSTRAINT

Average New York utility rates are among the five highest in the country.⁷⁷ The precise rank varies by type of customer and by utility, but the State's competitive position is not an enviable one. This situation complicates the task of improving utility infrastructure in the areas the Commission has highlighted. However, the State is not confined to a choice between making vital improvements on the one hand and preventing cost increases that would erode its competitive position on the other.

⁷⁵ While FEMA flood maps are available, the maps only identify the risk of an area being flooded and the coverage of different water heights.

⁷⁶ FloridaDisaster.org, http://map.floridadisaster.org/gator/map.html?config=config_evac_zone.xml (last accessed 6/19/2013).

⁷⁷ Average Price by State by Provider (EIA-861), U.S. Energy Information Administration (Oct. 1, 2012), available at <http://www.eia.gov/electricity/data/eia861/> (last accessed 6/19/2013).

The total bill paid by all New York customers to all New York utilities at the end of 2010 was \$23.7 billion.⁷⁸ Five years earlier, it was \$20.9 billion. Five years before that, it was \$16.2 billion. The Commission strongly recommends review and reduction of utility costs in any area in which they seem out of line with national averages in order to make revenues available for necessary infrastructure improvements. While some costs are on the table for serious scrutiny in individual rate cases, some are not. Inefficient configuration of utility service territories may be one area of potential savings. Tradeoffs between bill stability, infrastructure enhancement and renewable energy goals should also be reviewed.

Sound comprehensive policymaking in the electric utility sector is frustrated by the difficulty in getting all of these issues on the same table at the same time. Instead, separate debates take place in separate forums concerning rate levels, climate goals, taxation, economic development and demand side management. When these issues are addressed separately, the “solution” to any one problem tends to exacerbate others. Parties cannot make concessions in one proceeding because the concessions that they need in return are controlled by other parties in other proceedings before other decision makers.

5.2.1 OPTIONS FOR FUNDING INFRASTRUCTURE IMPROVEMENTS

Under the constraint of not directly raising rates to provide for funding of storm hardening infrastructure investments, the Commission identified potential options, including redirecting existing utility assessment funds, redirecting clean energy funds, and development of a new “feebate” type program where fees and rebates are used simultaneously to encourage a specific behavior. Such funding mechanisms could be designed similar to that used under the American Recovery and Reinvestment Act of 2009, where specific projects could be proposed by the utilities for funding and they would be evaluated based on their potential benefits and other predefined criteria (such as geographic and utility service territory equity). Each of these approaches is discussed in more detail below.

Option 1: Redirection of Existing Electric Assessment Funds

Section 18-a of New York Public Service Law authorizes the State to impose an assessment on public utilities to fund costs and expenses of DPS and PSC, limited to one percent of the utilities’ gross operating revenues. In 2009, a “temporary state energy and utility service conservation assessment” was added to this section of law, amounting to two percent of the utilities’ gross operating revenues minus the traditionally funded costs and expenses of DPS and PSC; this new assessment is credited to the State General Fund. In 2010, the amount credited to the State General Fund was \$519 million, as compared to the \$69 million that went to DPS/PSC to support their regulatory responsibilities. Similar amounts went to the State General Fund and DPS/PSC in subsequent years as shown in Figure 4 below.

Figure 4: 18-a Collections for PSC/DPS Funding vs. State General Fund

18-a Collections	2010-11	2011-12	2012-13
PSC/DPS Funding	\$69,205,806	\$62,333,038	\$72,353,000 ⁷⁹
State General Fund	\$519,018,900	\$527,094,371	\$508,670,498

⁷⁸ State Electricity Profiles, U.S. Energy Information Administration, Table 8, Line 21 (Jan. 30, 2012), <http://www.eia.gov/electricity/state/NewYork/> (last accessed 6/19/2013).

⁷⁹ This figure reflects the August 2012 revised billings and the 18-a Enacted Budget numbers. The final numbers for FY2012 will not be available until October 2013.

If, rather than going to the State General Fund, the funding collected as part of the temporary state energy and utility service conservation assessment were used to support infrastructure hardening investments, it could go a long way to preparing for future weather events without requiring collections from ratepayers beyond what they currently provide. The potential downside to such an approach is that redirecting these funds would then presumably leave a hole in the State General Fund of the same size that would need to be addressed. Also, as indicated by its name, the assessment is temporary and set to expire in 2017; if this funding were redirected until then, there would again be the issue of how to pay for such infrastructure investments beyond that time.

Option 2: Redirection of Clean Energy Funds

The State has collected hundreds of millions of dollars from ratepayers over the last decade to fund its clean energy programs, including EEPS, RPS, and SBC. Some of this funding that has been collected remains unspent and uncommitted, specifically \$108.5 million of EEPS and \$39.5 million of SBC.⁸⁰ Furthermore, the second phase of the EEPS program (EEPS II) is authorized to collect \$2.1 billion via a ratepayer surcharge for energy efficiency programs offered from 2012 through 2016.

The clean energy programs support a variety of State policy objectives identified in the State Energy Plan, including maintaining reliability, reducing greenhouse gas emissions, stabilizing energy costs and improving economic competitiveness, reducing public health and environmental risks associated with energy production and use, and improving the State's energy independence. However, as natural gas has become ever more prevalent in electric generation, and particularly as its cost is low, it makes the relative cost for energy efficiency and renewable investments greater.

While the Commission believes these clean energy program investments are important, it also recognizes the importance of electric infrastructure hardening investments at a time when ratepayers' wallets are stretched thin. Given this situation, the Commission sees the diversion of a *portion* of these clean energy program collections, in particular, the funding that remains unspent and uncommitted, to infrastructure hardening investments as an option to consider; however, this unspent and uncommitted amount falls significantly short of the level of investment needed for infrastructure hardening. Similar to Option 1, funding for the clean energy programs going forward is currently set through only 2018, so if a portion of these funds were redirected for infrastructure investments, there would again be the issue of how to pay for such infrastructure investments beyond that time. Also, and perhaps more importantly, redirecting clean energy funds for alternative uses sets a bad precedent. There will always be competing needs for ratepayer funding to support State policies and the energy market fluctuates, thereby changing the relative costs of energy sources. However, these clean energy programs are long-term investments in support of policies that are meant to move the State toward all of its energy-related objectives stated above. If clean energy programs were instead pursued only when they provided the greatest economic benefit over more traditional energy sources, they would likely be limited in success due to the sporadic signals being sent to the market.

Option 3: Development of an Anti-Hurricane Feebate Program

While not necessarily without ratepayer impact, the third option the Commission considered was an Anti-Hurricane "feebate" program. A feebate program is designed to use both imposition of fees and distribution

⁸⁰ With respect to the second phase of EEPS (2012-2015) and RPS, there are currently no funds that have been collected and encumbered but remain unspent due to discontinued programs or abandoned projects. Any funds that were encumbered for projects and subsequently discontinued/disencumbered were rolled back into the program in an effort to achieve program goals.

of rebates to incent particular behavior through penalties and rewards. An Anti-Hurricane feebate program could include a fee on ratepayers' bills to collect funding for infrastructure hardening investments and to provide rebates to any ratepayer who cuts their energy use by a certain percentage over a number of years, thereby incentivizing energy efficient behavior while simultaneously raising funding for hardening investments. While this would entail a new charge to ratepayers, it would also give them control over the amount of such fee or rebate and ultimately prevent potentially even greater cost repairs to the system following a storm event.

The Commission believes the State must assume that the types of storm events seen in recent years will continue to happen on a frequent basis. Therefore, storm hardening is necessary and must happen quickly to protect the ratepayers from economic and health impacts of future events. Furthermore, the Commission believes that to be financially responsible and contain costs for the ratepayers, the State must first explore any and all funding alternatives that do not increase rates. Where possible, it should re-direct excess ratepayer dollars to infrastructure investments, particularly before instituting cuts in energy efficiency spending.

Recommendations:

- **The State should at a minimum redirect the Public Service Law § 18-a funding that is currently collected from ratepayers as the temporary state energy and utility service conservation assessment and provided to the State General Fund to support electric infrastructure hardening investments.**
- **The State should consider the other options identified herein as well as any other funding mechanisms and efficiencies available to support electric infrastructure hardening investments.**

6 IMPROVING REGULATORY DEFICIENCIES

Throughout our work the Commission has been struck by one overarching shortfall. The people of New York have not been well served by aspects of the diminution and reorientation of utility regulation over the past 20 years. The Commission believes that the PSC of the 1970s, chaired by Joseph Swidler and then by Alfred Kahn and then again under the leadership of Peter Bradford from 1987 to 1995, was a national model. Its decisions were widely emulated and cited and it was staffed by recognized leaders in most of its fields. Top staff positions were filled on a nonpartisan basis and rarely if ever changed for political reasons.

The decline of New York utility regulation has been as much a product of national trends as of any particular ideology. Telecommunications is no longer dominated by monopoly companies. Neither is electric generation. Neither is the supply (as distinguished from the delivery) of natural gas. Each of these steps substituted competition for regulation and led to downsizing of the PSC.

The last two decades have also seen a trend toward so-called “performance based regulation,” pursuant to which utilities and the PSC agree not to undertake rate cases for extended periods. The intention, in part, is to provide incentives to cut costs in order to increase profits (or avoid losses) in the absence of rate changes. Various performance indexes replace close regulatory oversight in assuring that service doesn’t decline.

Other measures reducing regulatory scope were unique to New York, though still bipartisan in origin. LIPA was created in the 1980s to assist in the negotiations over Shoreham.⁸¹ It took over the Long Island electric system (which then moved out from under PSC jurisdiction) in the late 1990s.

Several of the recommendations in the Interim Report involved getting utility regulation back to its basic customer protection function. This does not entail undoing utility restructuring, which has brought clear economic benefits. But it does entail taking a close look at where restructuring has taken New York in order to make some corrections that time and experience have shown to be needed, beginning with the PSC's leadership. The legislative, regulatory and organizational improvements that this Commission has proposed are important, but they will mean little without excellent PSC leadership reinforced by Executive Branch support.

6.1 PSC TECHNICAL QUALIFICATIONS

New York State Public Service Law contains no minimum technical requirements for appointments to the Public Service Commission. This is not uncommon when compared with public utility commissions in other states – only 18 states have some level of technical requirements, and the detail of those provisions varies significantly.⁸² The Moreland Commission believes there is little to be gained from specifying academic backgrounds or professional categories in an effort to raise the quality of Public Service Commissioners, and in fact a number of fields could prove useful in such a position, including: accounting, business, consumer advocacy, economics, engineering, environmental studies, finance, and law. Statutory qualifications add only a small weight to the scales in appointments, confirmation, and public evaluation. Of more value is a demonstrated commitment and competence in furthering the public interest in the areas relevant to utility regulation. The Moreland Commission therefore recommends the Governor immediately adopt a policy for future PSC appointments and that the Public Service Law be amended to require that appointees to the PSC have such competence.

It has been speculated that the salary of PSC commissioners and the requirement that it be a full-time position have made it increasingly more difficult to find qualified candidates. However, the Commission's review of other states' public utility commissions revealed largely similar salary levels for full-time positions.⁸³

Recommendation:

- **Appointees to the Public Service Commission should have demonstrated in their careers a commitment and a competence in furthering the public interest in one or more areas relevant to utility regulation; the Public Service Law should be amended to codify this requirement.**

⁸¹ N.Y. Pub. Auth. L. § 1020-a.

⁸² Those states include Alaska (Alaska Stat. § 42.04.020), Arkansas (Ark. Code § 23-2-101 (a)(1)), Connecticut (Conn. Code § 16-2 (e)), Florida (Fla. Stat. § 350.031 (5)), Hawaii (HI Rev. Stat. § 269-2), Indiana (Ind. Code 8-1-1), Kentucky (Ky. Rev. Stat. § 278.060), Maryland (Md. Public Utility Code Annotated § 2-102 (b)(2)), Massachusetts (Mass. General Law, ch. 25, § 2), Minnesota (Minn. Stat. § 216A.03 (1)), Nevada (Nev. Code, Title 58, § 703.030), New Hampshire (N.H. Rev. Stat. § 363:1), Ohio (Ohio Rev. Code § 4901.02), Rhode Island (R.I. § 39-1-4), South Carolina (S.C. § 58-3-20), Tennessee (Tenn. Code § 65-1-101), Virginia (Va. Code § 12.1-9), and West Virginia (W.V. Code § 24-1-3 (b)).

⁸³ As dictated by statute (N.Y.S. Exec. L. §§ 169(1)(b), (1)(d) and (2)(a)) the PSC Chair's salary is \$127,000 and the Commissioners' are \$109,800. Examples of other states include: New Hampshire (RSA 94:1-a), - \$82,805 - \$110,036 Florida (set in annual budget) - \$130,036; and California (Cal. Gov. Code, Part 1, Chapter 6, Title 2, Division 3) - \$128,109 for Commissioner and \$132,179 for President (actual salaries not including cost of living adjustments).

6.2 EX PARTE COMMUNICATIONS

While there are various ways in which any interested party may appear before and/or file comments with the PSC, it is obvious that there exists disparity in the ability of certain classes of utility customers to avail themselves of direct access to the decision-makers at the PSC and DPS. The Commission learned during the course of its investigation that it is statutorily permissible and common practice for utility company executives, lobbyists and other paid representatives of interested parties to have unfettered access to the PSC Chair and Commissioners without having to disclose details of these conversations, presentation materials or other specifics to the other parties participating in cases before the PSC *ex parte* communications consist of evidence, arguments or other information related to a disputed issue pending before a decision-maker or in advance of such submission. Such communications are made in a manner that makes that information insufficiently available to challenge and counter by the adversely affected party or those with differing viewpoints. Since *ex parte* communications enable one party to influence a decision-maker off-the-record and outside the presence of the other interested parties, it effectively skirts procedural due process. *Ex parte* communications have the effect of undermining the indispensable fairness and unbiased attributes of decision-makers in judicial and administrative proceedings. Thus, actions to control those communications, in the form of statutory frameworks, become necessary for those proceedings before the agency to maintain fairness and transparency with the public-at-large.

Of particular concern to the Commission is that many ratepayers lack the necessary resources to express their opinions and concerns on matters that impact their lives and their pocketbooks, and that of other similarly situated New Yorkers. Such deficiencies may result in certain customers or customer groups, who are not in a position to advocate for themselves and may feel marginalized when compared to utility companies and other special interest groups during proceedings before the PSC. The Commission questions the fairness of allowing one side with virtually unlimited resources total access, while the other side lacks a similar voice.

Based on the Commission's research, the only two states that currently lack a statutory framework construct to control and manage *ex parte* communications concerning utility regulation are New York and Massachusetts. New York, in fact, through statute specifically exempts the application of any *ex parte* rules as they relate to public utility commissions. *Ex parte* rules governing state agencies are delineated by N.Y. A.P.A. Law § 307(2) which states:

*2. Unless required for the disposition of ex parte matters authorized by law, members or employees of an agency assigned to render a decision or to make findings of fact and conclusions of law in an adjudicatory proceeding shall not communicate, directly or indirectly, in connection with any issue of fact, with any person or party, nor, in connection with any issue of law, with any party or his representative, except upon notice and opportunity for all parties to participate. Any such agency member (a) may communicate with other members of the agency, and (b) may have the aid and advice of agency staff other than staff which has been or is engaged in the investigative or prosecuting functions in connection with the case under consideration or factually related case. **This subdivision does not apply (a) in determining applications for initial licenses for public utilities or carriers; or (b) to proceedings involving the validity or application of rates, facilities, or practices of public utilities or carriers. (Emphasis added)***

The statutory carve-out against the inclusion of *ex parte* rules as applied to public utility proceedings is unique to New York State. Similarly, the Massachusetts Administrative Procedure Act does not expressly use

the term *ex parte* when discussing communications or contact.⁸⁴ In both states, the effect in practice is that the presence of *ex parte* communications in administrative agency decision-making or PSC rulemaking is not statutorily barred. New York State and Massachusetts are anomalies compared to the other US states.

6.2.1 APPROACHES TO MANAGING EX PARTE COMMUNICATIONS

The exact verbiage used to limit or prohibit *ex parte* communications varies from state to state, but differs little in substance, each limiting *ex parte* communication. The real difference between each states' rules relate directly to the timing of the imposition of a ban on *ex parte* communication and whether communication is absolutely prohibited or instead, requires notice to all parties. Most states prefer a noticing provision and New York's State Administrative Procedures Act (SAPA) Law governing state agencies (those to which it applies) prohibits communication in adjudicatory proceedings "except upon notice and opportunity for all parties to participate", therefore the timing of the imposition of the ban is the more relevant issue here.⁸⁵

Approach 1: Imposition Upon Filing

The majority of states impose a "contested case" triggering event for the ban on *ex parte* communication to begin. In short, once a case is brought before an agency or commission, *ex parte* communications are prohibited. For example, Ohio's rule states:

*After a case has been assigned a formal docket number neither a member of the public utilities commission nor any examiner associated with the case shall discuss the merits of the case with any party or intervener to the proceeding, unless all parties and interveners have been notified and given the opportunity of being present or a full disclosure of the communication insofar as it pertains to the subject matter of the case has been made. Failure of any assigned examiner of the public utilities commission or any commissioner to abide by this section may, at the discretion of the commissioners, lead to that examiner's or commissioner's removal from a particular case or appropriate disciplinary action.*⁸⁶

This approach sets a clearly defined triggering event that encompasses the entire public comment and decision-making process.

Approach 2: Imposition Prior to Case Assignment

A small number of states, such as, Oregon,⁸⁷ Florida,⁸⁸ Ohio,⁸⁹ and North Dakota⁹⁰ have all imposed earlier triggering events related to the assignment of a case or a docketing of such matters. In particular, Florida has a very early triggering event that delineates a 90-day pre-filing period, where no *ex parte* communications can occur after a 90-day set out date from any filing in front of an agency or commission.

This is the most conservative approach; however, in some cases it may be difficult to predict the specific date that the rules would begin.

⁸⁴ 220 Mass. Code Regs. 1.02(9).

⁸⁵ N.Y. A.P.A. Law § 307(2).

⁸⁶ Ohio Rev. Code, § 4903.81.

⁸⁷ Or. Rev. Stat. § 215.422.

⁸⁸ Fla. Stat. Ann. § 350.042.

⁸⁹ Ohio Rev. Code § 4903.81.

⁹⁰ N.D. Cent. Code § 28-32-37.

Approach 3: Imposition upon Initiation of Decision-Making Phase

A very small minority of states have a later triggering event. Delaware,⁹¹ Oklahoma,⁹² Pennsylvania,⁹³ Washington,⁹⁴ and West Virginia⁹⁵ impose *ex parte* rules once a proceeding has moved to the decision-making phase and any deliberations by the decision-maker have begun. This triggering period excludes the period before and during any public proceedings.

This approach is the least conservative application of *ex parte* rules and does not include the public comment period which is critical in developing the record used in the PSC's deliberative process.

Perhaps one of the most important mandates of the PSC is to protect and enforce the rights of the public. The rules that govern New York's regulatory environment are complex and require specific acumen to navigate. The public expects, and indeed deserves, to be afforded full disclosure of PSC and DPS interactions with the parties involved in its proceedings. If the PSC is to hold itself out as safeguarding the public interest, it then must codify *ex parte* communications rules, thereby placing all New York ratepayers on a level playing field.

Recommendations:

- **The existing statutory exemption of *ex parte* rules as they relate to public utility commissions must be eliminated so as to subject the PSC to the same rules that other State agencies that are bound by SAPA.**
- **Upon elimination of the statutory exemption of *ex parte* rules, the PSC should enact an implementing regulation that includes a specific triggering event, preferably with a set term prior to filing with the PSC, along with sanctions that are sufficient enough to deter violations (i.e., fines).**

6.3 CONSUMER ADVOCATE

The PSC's primary charge is ensuring safe, secure, and reliable access to utility services at just and reasonable rates. Invariably, the PSC must weigh the needs of regulated utilities against the needs of ratepayers. But a problem arises when the judge – i.e., the PSC – hears overwhelmingly from well-funded and professional advocates and economists representing business interests but not from consumer interests. This status quo brings to mind the observation of the late Senator Warren Magnuson (D-WA), who said “all anybody wants in life is an unfair advantage.”

But fairness and due process – as there is in judicial proceedings – requires that two sides debate crucial issues involving, say, utility rates, modernizing the electric grid, establishing the right level of capital investments, and storm hardening so the State is not penny-wise-and-pound-foolish when the next devastating Hurricane Sandy hits.

Indeed, interviewed stakeholders – such as the American Association of Retired Persons (AARP), the Public Utility Law Project (PULP), and Consumers Union -- questioned the PSC's very capacity to mediate the

⁹¹ 29 Del. C. § 10129.

⁹² Okla. Stat., tit. 5, Ch. 1, App.4.

⁹³ 66 Pa.C.S.A. § 334.

⁹⁴ RCW 42.36.060.

⁹⁵ W. Va. Code § 29A-3A-6.

concerns of the regulated utilities with that of individual ratepayers. These groups expressed alarm about what they regarded as a complex legal jungle that surrounds the PSC.

But since public officials created these governmental regulatory structures, they can also fix them. These stakeholders informed us that at least 40 other states have initiated a consumer advocate effort to be a counter-weight to the utilities in proceedings.⁹⁶

The Commission has examined the form, funding levels and abilities of customer advocates in several states including California, Texas, Florida, Illinois, Ohio, Pennsylvania, New Jersey, Connecticut, Vermont, Massachusetts and New Hampshire. As part of its review, the Commission considered the prevailing methods of consumer advocacy as well as stakeholders' major concerns regarding the representation afforded to the general ratepayer in advocating in front of their respective regulatory bodies. A general concern communicated was that effective ratepayer advocacy requires independence from the regulatory body that sets electric rates.

This independence is defined as: (1) having the ability to take the rate setting body to court, and (2) having control over the advocates' budget and staff without political interference (of the kind, for example, that marred LIPA's effectiveness).

Pennsylvania,⁹⁷ Connecticut,⁹⁸ Florida,⁹⁹ New Hampshire¹⁰⁰ and Texas¹⁰¹ have dedicated independent consumer advocacy offices located outside the organizational structure of the Office of the Attorney General (AG), Department of State (DOS) or the utility regulatory body, with autonomous directors, staff, and budgets. These offices have the authority to act as intervening parties to advocate for ratepayers in front of the applicable utility regulatory bodies in a variety of proceedings as well as commence and participate in litigation.

For example, in 1983 the Illinois Legislature created the Citizens Utility Board (CUB)¹⁰² which advocates before the Illinois Corporation Commission and in court proceedings. Funding for the Citizens Board comes via voluntary donations and membership dues from Illinois ratepayers. It was launched with a \$100,000 loan from the state, which was repaid in full and with interest. The group is now funded through small, voluntary donations from 100,000 members thereby organizing similarly situated people to make a case at nearly no taxpayer cost.

⁹⁶ National Association of State Utility Consumer Advocates, *available at* <http://www.nasuca.org/archive/about/index.php> (last accessed 6/19/2013).

⁹⁷ Pennsylvania Office of Consumer Advocate, *available at* http://www.oca.state.pa.us/information_links/brochure.htm (last accessed 6/19/2013).

⁹⁸ State of Connecticut, Office of Consumer Counsel, *available at* <http://www.ct.gov/occ/cwp/view.asp?a=1419&q=260490> (last accessed 6/19/2013).

⁹⁹ State of Florida, Office of Public Counsel, *available at* <http://www.floridaopc.gov/about.cfm> (last accessed 6/19/2013).

¹⁰⁰ State of New Hampshire, Office of Consumer Advocate, *available at* <http://www.oca.nh.gov/> (last accessed 6/19/2013).

¹⁰¹ State of Texas, Office of Public Utility Counsel, *available at* <http://www.opuc.texas.gov/about%20us.html> (last accessed 6/19/2013).

¹⁰² State of Illinois, Citizens Utility Board, *available at* <http://www.citizensutilityboard.org/mission.html> (last accessed 6/19/2013).

Funding for this type of office generally comes from state budgets as was the case for the New York State Consumer Protection Bureau (CPB). At its peak, the CPB had a staff level of approximately 30 in 2008 with a total budget of some \$4 million.

However, in 2012 the CPB was abolished, renamed the Utility Intervention Unit (UIU)¹⁰³ and merged into the New York State DOS. The UIU currently has a budget of approximately \$500,000 and small staff (a director and three employees).

As another example, in California, the Division of Ratepayer Advocates (DRA)¹⁰⁴ has a staff of approximately 100 and an annual budget in excess of \$27 million according to its 2012 Annual Report.¹⁰⁵ California also has an independent not-for-profit utility consumer advocacy organization, The Utility Reform Network (TURN), which is funded through donations and intervener funds at a level of approximately \$4 million annually.¹⁰⁶

The Commission believes strongly that the PSC, once New York has better qualification standards for appointees as well as stricter *ex parte* rules (see sections 6.1 and 6.2), requires a robust, permanent, professional consumer advocate office to represent ratepayers. There are three possible models that the Governor – or Governor and Legislature – should consider:

- *An Executive Order* could establish a CUB with an initial board of three members appointed by the governor, speaker, and majority leader respectively that mirrors Illinois' volunteer funding model whereby it is empowered to raise funds from individual ratepayers. Thereafter an Executive Director will be chosen by the Board or by the contributing members. Along with support staff, they will be charged with drafting governing CUB regulations.
- *Legislative Option A*: establish a gubernatorial administered CUB with an alternate funding mechanism whereby it would receive a fixed percentage of either the PSC's or NYSERDA's annual budgets.
- *Legislative Option B*: establish a gubernatorial administered CUB with an alternate funding mechanism whereby it would receive a fixed percentage of either the PSC's or NYSERDA's annual budgets, with an Executive Director appointed for a fixed term removable only for cause.

The Commission urges the State to take action to ensure that the CUB be insulated from political interference and budget retaliation.

Recommendation:

- **The State should create a Citizens Utility Board that is independent, controlled by ratepayers, adequately funded and not subject to political interference using one of the models identified herein.**

¹⁰³ New York State Department of State, Division of Consumer Protection, *available at* <http://www.dos.ny.gov/consumerprotection/aboutus.html> (last accessed 6/19/2013).

¹⁰⁴ State of California, Division of Ratepayer Advocates, *available at* <http://www.dra.ca.gov/default.aspx> (last accessed 6/19/2013).

¹⁰⁵ State of California, Division of Ratepayer Advocates, 2012 DRA Annual Report, *available at* <http://www.dra.ca.gov/AR2012.aspx> (last accessed 6/19/2013).

¹⁰⁶ The Utility Reform Network, *available at* <http://turn.org/about.html> (last accessed 6/19/2013).

INVESTIGATIVE FINDINGS AND RECOMMENDATIONS

7 THE COMMISSION'S INVESTIGATION

7.1 INVESTIGATIVE SUMMARY

The Moreland Commission's investigation into New York's IOUs has uncovered systemic problems within the industry, including inefficiencies, disorganization and lack of planning. The Commission has also found that, despite repeated recommendations from the PSC, the IOUs have consistently failed to improve certain areas of their electric operations. This unwillingness to reform is especially concerning given that these utility companies are conferred natural monopolies. The devastation suffered during the Recent Storms and the Commission's investigative findings have affirmed the need for industry reform. As the Commission proceeded in its investigation, it remained mindful that not all the utilities were affected by the same storms and some faced unique challenges based upon the location and topography of its service area.

7.1.1 LACK OF PREPARATION FOR RISK OF FLOODING.

The Commission found that a number of utilities were not adequately prepared for the effects of damage caused by widespread flooding during Hurricane Irene, Tropical Storm Lee and Hurricane Sandy. While these utilities took some actions to protect their own infrastructure, it was often not enough to prevent sizable interruptions to service. In addition, these utilities did not have a plan in place to isolate and restore customers who experienced damage to their own equipment. This was most notable with Con Edison's need to develop an expedited inspection process following Hurricane Sandy, which took over a week to develop and publicize. In addition, the Commission's investigation found that the utilities' emergency plans lacked formalized processes for dealing with the restoration of homes and businesses that were shut off due to severe flooding. In short, the lack of flood restoration planning was a significant problem experienced during Hurricane Irene, Tropical Storm Lee and Hurricane Sandy, causing customer confusion and unnecessary delays in restoration.

7.1.2 LACK OF LOCALIZED ESTIMATED RESTORATION TIMES (ETRS)

The Commission found that the IOUs continue to struggle to provide timely, accurate estimates for when power will be restored to their service areas. Such estimates are essential for allowing customers to plan for the outage period. Based on Grid New York's slow issuance of ETRs following the 2008 Ice Storm, the DPS developed guidelines to help ensure ETRs are made public in a timely manner.¹⁰⁷ For example, for events predicted to last more than five days (as applied to both Hurricanes Irene and Sandy), utilities are expected to develop global ETRs within 48 hours of the start of the restoration period. Additionally, because—to varying degrees—utilities do not have complete field information to come up with an informed estimate within that time period, the initial ETR should indicate that a comprehensive damage assessment has not been completed, and that the ETR may change once additional field information is gathered.

Certain utilities repeatedly failed to develop timely, accurate local ETRs. O&R is one notable example. Its failures during Hurricane Sandy are of concern given its problems with ETRs in prior storms, which the DPS

¹⁰⁷ New York State Department of Public Service, *Report on Utility Performance for October and December 2008 Winter Storms*, at 22 (June 2009) [hereinafter *DPS 2008 October & December Winter Storms Report*]. (stating that by delaying the release of an ETR, National Grid did not provide the information needed by customers and emergency management personnel to allow them to make informed decisions).

has repeatedly criticized in past storm investigations. The Commission also notes that while NYSEG was ultimately able to issue ETRs for its divisions, it failed to provide more granular ETR information to customers. NYSEG's philosophy, like some of the utilities investigated, is to "under promise and over deliver."¹⁰⁸ The Commission notes that the PSC is currently soliciting comments on a utility performance scorecard that contains proposed metrics regarding the accuracy and publication of ETRs to better measure ETR performances.¹⁰⁹

It is clear from the Commission's investigation that New York's electric utilities need to improve their development and timely issuance of ETRs. Customers deserve to have accurate estimates of when their lives will return to normal.

7.1.3 UNRELIABLE TECHNOLOGY IN MAJOR STORMS

A number of the utilities' website outage maps suffered glitches and malfunctioned during Hurricane Sandy. Customers increasingly rely on website outage maps for outage information. O&R's outage map was at times inaccurate and suffered a number of glitches. Con Edison's outage map was also problematic, which confused customers during the restoration period. National Grid also suffered problems with its outage map during both Hurricanes Sandy and Irene. National Grid's outage map suffered delays and was sluggish and unusable at times. The outage map and technology failures were in part tied to failures in the utilities' computerized outage management systems, which in many cases failed to keep up with increased user volume during emergency conditions.

7.1.4 COORDINATION WITH LOCAL GOVERNMENTS

Coordination and communication with local governments and public officials was another problem area for the utilities during the Recent Storms. Con Edison, NYSEG and O&R municipal liaisons were largely ineffective and incapable of providing any more information than that contained on the utilities' public websites. In addition, O&R and Central Hudson did not adequately staff their municipal liaison departments for Hurricane Sandy. This caused local governments undue confusion and impeded coordination efforts between the utilities and local government officials. The lack of coordination between local governments and the utilities was especially obvious in O&R's ineffective coordination of road clearing of its down wires with local governments' tree removal efforts during Hurricane Sandy.

7.2 INDUSTRY REFORMS AND RECOMMENDATIONS

7.2.1 MUTUAL ASSISTANCE SYSTEM NEEDS REFORM

Utility staffing levels are based on daily and annual forecasted workloads. As a result, the utilities do not have the required field personnel at hand to effectively respond to large storms, and therefore need to supplement their workforce by obtaining crews from other neighboring utilities. This mutual assistance process follows the Edison Electric Institute's (EEI) governing principles, in which nine established Regional Mutual Assistance Groups (RMAGs) coordinate the sharing of resources within their respective states.¹¹⁰ Utilities serving New York are part of the New York Mutual Assistance Group (NYMAG). Therefore, for a New York

¹⁰⁸ NYSEG "Estimated Restoration Time (ERT) Philosophy" (NYSEG-RGE 00014856).

¹⁰⁹ New York State Public Service Commission, Case 13-M-0140 Proceeding on Motion of the Commission to Consider Utility Emergency Performance Metrics (Apr. 18, 2013).

¹¹⁰ RMAGs are as follows: Northeast Mutual Assistance Group, New York Mutual Assistance Group, Mid-Atlantic Mutual Assistance Group, Great Lakes Mutual Assistance Group, Southeastern Electric Exchange, Wisconsin Utilities Association Mutual Assistance Group, Midwest Mutual Assistance Group, Texas Mutual Assistance Group, Western Region Mutual Assistance Group.

utility to obtain assistance, it would request crews via NYMAG conference calls.¹¹¹ The request would be fulfilled by other utility crews in New York, if available, or NYMAG would reach out to other RMAGs for assistance. The utility requesting the crews is responsible for reimbursing the utility(s) providing the crews for the days that they are away, even if a storm does not impact the area.

The Commission has identified numerous problems with the industry's current mutual assistance systems. While the Commission acknowledges the benefits of mutual assistance in general, it has concerns with the effectiveness of the current system during large-scale storm events. First, the number of people of who are routed through the system prior to storms is limited to utility workers and not contractors or other skilled personnel. Because of the limited pool, there is little movement within the process early on, since utilities are reluctant to offer their workforce until a storm's impact on their system is known. Con Edison's efforts to obtain resources from the mutual assistance process in advance of Sandy are illustrative in this regard. Prior to Sandy's arrival, Con Edison requested field staff through the mutual assistance process to supplement the limited crews it had obtained. On October 25, 2012, Con Edison requested 1,800 lineworkers, but was only allocated 32 people on October 27, 2012, (from San Diego Gas and Electric Company). On October 28th, Con Edison raised its request to 2,500 line workers and was allocated 171 additional crews from Pacific Gas and Electric.¹¹² Despite airlifting personnel and vehicles, the support did not arrive until the evenings of October 31, and November 2, 2012.

Second, the system restrains movement between RMAGs, so worse hit areas must wait for crews until lesser affected areas are close to full restoration. While this provides security for the individual RMAGs, it hampers appropriate responses on a national level.

Third, attempts to obtain assistance outside of the RMAG system—such as by petitioning other utilities directly for additional crews without engaging the appropriate mutual assistance group—weaken the mutual assistance function by further reducing the number of crews that are available to them through the mutual assistance process.

Each of the three areas identified above interact with each other, undermining the efficiency of the system and creating a highly competitive process for utilities to obtain outside resources on their own. Because of the uncertainty of the mutual assistance process, Grid New York told the Commission that it uses the NYMAG and RMAG processes as a last resort for obtaining crews to assist in its restoration efforts. As an alternative to the mutual assistance process, Grid New York tends to “crew up” for storm events several days prior to activation of the NYMAG and RMAG processes.¹¹³ Grid New York's securing of contractor resources prior to other utilities has also led to concerns and criticisms relating to the Company incurring costs for crews well in

¹¹¹ Mutual assistance conference calls are held in advance of a storm and throughout the restoration period until there are no outstanding requests.

¹¹² Consolidated Edison Company of New York, Inc. Report on Preparation and System Restoration Performance, Sandy October 29 through Nov. 12, 2012, at 58 (Jan. 11, 2013) [hereinafter Con Edison Sandy Part 105 Report]; Oct. 26, 2012 Email re: Mutual Assistance Summary (CE_00013356) (where Tony Torphy, Director, Electric Operations for Emergency Management, Con Ed, reports that Con Edison received no mutual aid crews even though it requested 1,800 FTEs. He notes “the only available resources east of the Rockies were 139 FTEs in the Mid-West Mutual Assistance Group. These 139 workers were distributed to the MAMA and NYMAG companies.”).

¹¹³ May 15, 2013 Interview of Allen Chieco (Director of Network Strategy for Electric, National Grid New York) [hereinafter Chieco Interview]; May 28, 2012 Kenneth Daly (President of National Grid New York) Hearing Transcript, at 22-23 [hereinafter Daly Transcript] (recalling that Grid New York began looking for outside resources nearly a week before Hurricane Sandy made landfall); May 28, 2013 Interview of Bill Akley (Senior Vice President of Maintenance and Construction, National Grid) [hereinafter Akley Interview].

advance of a storm when the need for crews is still uncertain.¹¹⁴ It was noted that in the event that Grid New York has excess crews for its restoration efforts during major storm events, it will release these crews to New York State utilities.¹¹⁵

Overall, the mutual assistance process appears to function better during smaller and more localized events. In addition, the deficiencies discussed above have been amplified as the mutual assistance process is expanded to include resources for damage assessment, public safety, and logistics. In order to ensure that the mutual assistance process plays a more significant role in providing resources at the outset of large storm responses, the Commission believes that national reforms are needed to address these deficiencies. One possible step would be to include contractor crew allocations prior to a major storm event.

Train National Guard to Assist in Storm Preparation and Restoration

During Sandy, Con Edison, O&R and NYSEG received help from the National Guard (Guard).¹¹⁶ The Commission believes that consideration should be given to expanding the Guard's role in supporting restoration efforts for all utilities in major storm events. This would require significant planning and coordination between State officials, the Guard and utilities to reach consensus on the circumstances under which the Guard would become involved, the functions its members would play, and the effective integration of Guard members into the utility restoration efforts. In discussions with the utilities, the Commission has identified a potential role for Guard members in pre- and post-storm functions, some of which would require training, including assessments of electrical equipment and damaged homes, the coordination with utilities for removal of downed wires and trees, and set-up and operation of staging areas and base camps.

The use of the Guard should be able to be integrated seamlessly going forward since the utilities currently use their non-operational personnel for specific storm operations (i.e. storm role)¹¹⁷. Because the assignments may be different than an employee's normal "blue-sky" role, each utility has defined training programs to instruct employees on how to perform their assigned tasks. Additionally, many utilities hold "refreshers" in the days prior to predicted storms to help mitigate inaccuracies during an event. For example, damage assessors within Con Edison undergo a four-hour course. To better understand the overhead electric system, the course is divided between two hours of classroom study and two hours at Con Edison's Learning Center where there are physical examples of equipment, poles and other electrical equipment. In addition to classes, companies, such as Central Hudson, have pre-printed cards on a ring to assist damage assessors correctly identify equipment when in the field.

The Commission believes that the utilities should identify the best practices used to train and instruct Guard personnel in the areas previously identified. In order for the Guard to be most effective and be able for deployment across the state, the training should be developed using a common platform and methods to

¹¹⁴ Daly Transcript, at 23-24; May 17, 2013 Interview of Dave Ethier (National Grid Eastern Division Director of Overhead Lines) [hereinafter Ethier Interview] (noting that, under the industry procedures for obtaining foreign crews, the company that solicits the crews begins paying for the crews' time as soon as the crews begin traveling to that utility's territory).

¹¹⁵ Ethier Interview; May 23, 2013 Interview of Ellen Smith (former National Grid Chief Operating Officer) [hereinafter Smith Interview]; Daly Transcript at 47 (describing how Grid releases crews to Con Ed, LIPA, and Central Hudson as applicable).

¹¹⁶ To deal with the shortage in site safety personnel, some companies eventually engaged resources from the National Guard. This could be a long-term solution for obtaining additional site safety resources in future storms.

¹¹⁷ For example, Con Edison has indicated that the majority of its employees have a System Emergency Assignment.

identify and report electric components or other deficiencies in a consistent manner. The program should identify how often training should occur as well as when refresher training prior to the National Guard field deployment is appropriate.

Recommendations for utilities:

- **Engage in an industry-wide effort to address deficiencies in the current mutual assistance process.¹¹⁸**
- **Re-examine internal and external emergency staffing plans to address any perceived shortages in site safety or damage assessment personnel.**
- **Consideration should be given to expanding the National Guard's role in supporting utility restoration efforts in major storm events.**

7.2.2 COORDINATION WITH TELECOMMUNICATION AND CABLE PROVIDERS

Utility Coordination with Telecommunication Providers

A large segment of New York's population rely upon their phone service, including that provided by voice over internet protocol, and the internet for communicating during weather emergencies. Therefore, it is essential that these industries coordinate a means to share customer information in order to create a more efficient restoration process to better serve New Yorkers. The extent of the Recent Storms and resulting outages highlighted the dependency of telecommunications equipment on commercial power. While many major telecommunications facilities have permanent generators as a backup, certain locations (e.g., a cellular tower) may only be equipped with batteries that have limited backup capacity. With some exceptions, the communication between the electric utilities and telecommunications providers to address these issues was inadequate.

Improvements could include having the electric utilities provide telecommunication providers with senior management level contacts or providing power restoration information to telecommunication providers through State Office of Emergency Management (OEM) reports. Whatever mechanisms are adopted, it is clear that effective communication between these two industries is essential, as it ensures that emergency responders and customers have a means to effectively communicate during a long-term event. As such, the Commission believes that government entities, including the Federal Communications Commission, should examine and make recommendations with respect to, among other things, the extent to which a telecommunications provider should be self-sufficient and the best means for communicating between the telecommunication and electric utility industries.

Utility and Cable Provider Coordination

An electric utility only needs a limited number of monitoring devices to manage its operation. As a result, however, a utility's ability to measure outages in localized areas is extremely limited during storms. Utilities must therefore rely on customers to inform the company, typically via telephone calls, that the power is out at a particular location. Outage information gathered from all sources is entered into a utility's Outage Management System (OMS), which models its electric system and the components on a scale such that the

¹¹⁸ The Commission interviewed representatives from the Edison Electrical Institute, which is currently leading a taskforce to examine mutual assistance and material resources. The Institute plans on making specific recommendations on these issues to its Board of Directors, made up of representatives from the electric utility industry, in June 2013.

utility can tell which transformer serves an individual account. While more devices with monitoring capabilities are being installed, the reactive nature of having to wait for outage reports is prevalent.

Unlike the electric system, today's cable systems employ two-way communications, enabling the cable providers to offer services such as video on demand and facilitating the transmission of system status information back to the cable provider. One such piece of information provided back to the service provider is whether particular network devices (cable boxes or nodes, for example) have power. This proactive method of collecting outage location information would be advantageous to electric utilities because it can rapidly identify the extent of outages in neighborhoods or on streets. Additionally, as the restoration progresses, the technology would allow for the identification of single homes still without power, a more onerous task currently performed by using outbound calls or waiting for customers to re-report an outage.

The Commission recommends that all New York investor-owned utilities and Long Island's next utility provider coordinate with their local cable company (or companies) to obtain cable network information related to loss of power during a storm.¹¹⁹ One way to accomplish this is through increased communication between the utilities and their cable providers, and/or placement of utility and cable personnel within each other's emergency command centers.

Recommendations for all utilities:

- **Formalize coordination with telecommunication and cable providers before and during major events, including the placement of utility and cable personnel within each other's emergency command centers.**
- **Cable providers and utilities should devise a means to share relevant system information during emergency periods.**
- **Re-evaluate utility emergency plans in light of the Recent Storms and ensure that critical infrastructure lists include critical telecommunication and cable facilities.**

7.2.3 COORDINATION BETWEEN UTILITIES AND GOVERNMENT TO CREATE AUTOMATED EMERGENCY WAIVER PROTOCOLS

During the restoration process, utility crews and their equipment must be able to travel freely and safely between service areas, and sometimes across state and national borders. However, their travel during Hurricanes Irene and Sandy was at times delayed by unnecessary logistical hang-ups at toll roads, bridges and customs entry points.¹²⁰ Utilities had to scramble to obtain emergency waivers and permits in the midst of the restoration effort: for example, as mutual assistance crews were traveling to Con Edison's service territory, Con Edison was in the process of obtaining certain waivers and permits, such as high-occupancy

¹¹⁹ During Hurricane Sandy, through Cablevision's encouragement, Cablevision and LIPA began to work together to exchange such information as part of the storm response effort by using Cablevision's proprietary mapping software. The Moreland Commission requested to review Cablevision's software to understand the full potential of the two-way communication process.

¹²⁰ Akley Interview; Observation Tracker (NG-E-00533119) ("Need mechanism to provide emergency declaration letter to ops . . . Should coordinate river crossings, bridges with local law enforcement - if possible - in advance of event"); Dec. 12, 2012 Email re: No toll charges for Mutual Aid vehicles (NG-E-00228142) (email chain discussing the need for toll waivers, EZ Passes disseminated, and other advanced planning by municipalities for crews to seamlessly access New York regions).

vehicle lane exceptions and toll waivers.¹²¹ Likewise, NYSEG reached out to the New York State Department of Transportation (DOT) during the restoration period to ensure that heavy equipment being moved into the area had waivers to use certain bridges and roadways.¹²² Procedures and processes need to be developed to avoid these emergency responders being unnecessarily delayed in assisting with storm restoration. To that end, utilities should work with government agencies to identify, to the extent practical, protocols to automatically enact emergency waivers based on predicted storm conditions to allow for more streamlined response processes.

Recommendation:

- **Work with governing entities to explore the possibility of developing a process to enact waivers or other simplifications of permits and tolls to assist crews traveling to aid in restoration efforts.**

7.2.4 COMMUNICATIONS WITH LIFE SUPPORT EQUIPMENT CUSTOMERS

Under 16 NYCRR Section 105.4(b)(9), the New York electric utilities are required to include in their Emergency Plans specific procedures for contacting life support equipment (LSE) customers within the first 24 hours of a pending emergency.¹²³ Incorporation of best practices over time has resulted in utility emergency plans that provide for notification prior to an event as well as daily contacts throughout the restoration period. To help assist with customers that were not reachable by phone, many utilities have developed policies that refers these unreachable customers to first responders or emergency management offices who physically go to the customer premises to establish contact.

As part of DPS's review of Hurricane Irene and Tropical Storm Lee performance, it noted that the electric utilities should work with referral entities to strengthen follow-up processes and to ensure that feedback regarding LSE customers that have been referred for contact assistance is obtained and recorded. Con Edison, for example, has established a separate telephone number for use between it and local police departments to discuss LSE customers who were not contacted. Additionally, there are proactive measures taken by utilities to contact the referral entities if they do not receive any information. By "closing the loop" with the referral entity, the utility maintains appropriate awareness of the status of these customer to know if they are safe or in need emergency assistance. The Commission sees value in coordination between the utilities and county or municipal agencies, i.e., Departments of Social Services or Aging, who may be in a position to offer staff resources to assist with LSE customer outreach during emergency events when utilities' staff resources are stressed.

Recommendation for all utilities:

- **The PSC should direct the investor owned utilities to codify in their Emergency Plans the modified LSE outreach processes as described above, including coordinating with county and municipal agencies. This recommendation should also be applicable to LIPA.**

¹²¹ Apr. 4, 2013 John Miksad (Senior Vice President of Electric Operations, Con Edison) Hearing Transcript at 50:2-11 [hereinafter Miksad Transcript].

¹²² Apr. 4, 2013 Mark Lynch (President, NYSEG & RG&E) Hearing Transcript at 124 [hereinafter Lynch Transcript].

¹²³ LSE customers is defined in 16 NYCRR Part 105 as those who require electrically operated machinery to sustain basic life functions.

7.3 WORKFORCE DEFICITS AND ADVERSE IMPACTS ON STORM RESPONSE

Severe storm events have highlighted longstanding, industry-wide problems with aging infrastructure and personnel. These problems have evolved over years and will take years to fix.¹²⁴ In 2005, the International Brotherhood of Electrical Workers (IBEW) described the problems posed by an aging utility workforce as a “demographic time bomb.”¹²⁵ According to a survey conducted by the Center for Energy Workforce Development, the size of the industry workforce has decreased by more than 11,000 jobs since 2009, the average age of the workforce increased from 45.7 years in 2006 to 46.1 in 2010, and the number of employees with more than 30 years of service has increased by 5.2% since 2006.¹²⁶ The IBEW says inadequate workforce staffing ratios are the primary reason for poor performance and delayed utility restoration during these types of storms.¹²⁷ A number of factors have contributed to this circumstance: electric demand is growing; Smart Grid initiatives require operators with more training and higher skill levels; and utility infrastructure is aging. The aging of the workforce is problematic during storm response because human resources, just like physical plants, are less resilient and more vulnerable during high stress conditions. The problem is further exacerbated because fewer workers must perform even more work during storm response and restoration. Mandatory overtime in the form of multiple 16-hour days under the worst of physical circumstances is taking its toll and threatening the storm preparation and response of the industry.

New York’s utilities have not been immune to these industry-wide trends. For example, “performance based” ratemaking initiatives have, according to the IBEW, been accompanied by dramatic reductions in utility staffing levels. They noted that even where workforce reductions have not been drastic, increased workloads, and higher overtime demands, have affected utility service on Long Island. According to IBEW, 50% of the utility workforce will be eligible for retirement within the next five years.¹²⁸ Moreover, it takes five years of training to become a journeyman line worker. Representatives from IBEW Local Union 3, interviewed by the Commission during its investigation, reported a great need for overhead workers. According to their data, the number of overhead utility workers serving Staten Island (which is served 90% by overhead lines) has been reduced from between 60 and 70 down to 45.¹²⁹ The remaining workers often work 11-hour days and have maxed out their overtime. IBEW Local 3 representatives stated that Con Edison sees no need to replace a worker until they retire, causing workforce gaps and skills deficits.¹³⁰ This same sentiment was shared with

¹²⁴ Wayne Bishop Jr., *Transformers Aren't the Only Aging Utility Assets*, NETA World J. (Spring 2009), available at <http://appanet.cms-plus.com/files//Associate/BishopE%26O2007.pdf> (last accessed 6/19/2013); Steven Brown, *Transformers and Circuit Breakers Not the Only Aging Utility Resources*, Electric Light & Power vol. 83, Issue 3 (2005), available at <http://www.elp.com/articles/print/volume-83/issue-3/opinion/transformers-and-circuit-breakers-not-the-only-aging-utility-resources.html> (last accessed 6/19/2013); Transmission & Distribution World, *Linemen Feel the Pinch* (Mar. 1, 2000), available at <http://tdworld.com/archive/linemen-feel-pinch> (last accessed 6/19/2013).

¹²⁵ IBEW, *Worker Shortage Threatens Utility Industry*, IBEW Journal, (April 2005), available at http://www.ibew.org/articles/05journal/0504/p12_shortage.htm (last accessed 6/19/2013) [hereinafter IBEW Article].

¹²⁶ Center for Energy Workforce Development, *Gaps in the Energy Workforce Pipeline 2011 CEWD Survey Results* (2011), available at <http://www.cewd.org/surveyreport/CEWD-2011surveyreport-021512.pdf> (last accessed 6/19/2013).

¹²⁷ IBEW Utility Labor Council State of New York Newsletter, available at <http://www.utilitylaborcouncil.com/content/whistleblowers-staffing-ratios-training-psc> (last accessed 6/19/2013).

¹²⁸ Mar. 6, 2013 Interview with Representatives from Local 1249, Local 1049 and Local 97.

¹²⁹ Mar. 18, 2013 Interview with Representatives from IBEW Local Union No. 3.

¹³⁰ *Id.*

the Commission at the Lake Placid Moreland Commission hearing, where one of the only criticisms articulated of NYSEG's performance was that its line worker staffing levels have been decimated over the past decade, with no perceived efforts for replenishing them.¹³¹

During storm response, these trends have led to an increasing reliance on mutual assistance responders. For example, Con Edison's workforce was supplemented by more than 5,600 mutual assistance utility workers during the response to Hurricane Sandy.¹³² According to the Utility Workers Union of America, American Federation of Labor and Congress of Industrial Organizations (UWUA), Con Edison has cut staff, deferred critical maintenance, and "appears to operate its electric distribution system based on a policy of 'run it until it fails.'" The UWUA asserts that Con Edison "lacks sufficient manpower to conduct needed preemptive maintenance and related repairs" to its system.¹³³ The union further asserts that, due in part to these staffing cuts, before Hurricane Sandy hit, Con Edison's system was "in a weakened condition."¹³⁴ Moreover, according to the UWUA, Con Edison's reliance on mutual assistance in response to Hurricane Sandy was problematic because many of the outside workers "had no training on performing service restoration in the unique urban and underground utility environment in Con Edison's territory."¹³⁵ Given these concerns, the UWUA recommends that Con Edison increase its full-time, in-house staffing levels, and evaluate the impacts of the "graying" of Con Edison's workforce.¹³⁶

These trends, including an aging workforce and the need to achieve ever greater efficiencies, create industry-wide challenges. Accordingly, all utilities should take steps to evaluate and address these challenges. For example, utilities could vigorously test proposed staffing levels against severe storm conditions. This approach has already been employed, albeit in a different context, by National Grid. Prior to National Grid's U.S. reorganization in 2011, which involved a reduction of about 1,000 managers and supervisors, the utility conducted a "span of control" review to study how staffing cuts through consolidation would affect operations.¹³⁷ The review analyzed the number of crews per supervisor and also accounted for emergency situations. Tabletop drills were used to simulate storm conditions and test the proposed staffing levels. Based on intelligence gleaned from such review, National Grid decided to cut fewer managers and supervisors.¹³⁸ The Commission believes this may present a best practice for the industry to apply when determining appropriate lineworker staffing levels.

Recommendation:

- **Utilities should review existing staffing levels and evaluate the impacts of an aging workforce on their abilities to effectively respond to a major event.**

7.4 UNIFY FLOOD INSPECTION PROCEDURES

The Commission examined the procedures surrounding inspections of flood damage to customer equipment both upstate and downstate New York. The process to inspect customer equipment damaged by floodwaters

¹³¹ Feb. 20, 2013 Moreland Commission Public Hearing Transcript at 50.

¹³² Utility Workers Union of America, AFL-CIO, *The Impact of Hurricane Sandy on Consolidated Edison of New York: Assessment of Restoration Efforts and Recommendations For the Future*, at 1 (Feb. 2013) [hereinafter UWUA Position Paper (Feb. 2013)].

¹³³ *Id.* at 2.

¹³⁴ *Id.* at 4, 5.

¹³⁵ *Id.* at 2, 9.

¹³⁶ *Id.* at 15,16.

¹³⁷ Akley Interview.

¹³⁸ *Id.*

prior to restoring power was developed separately by each municipality, often in coordination with the utility serving that locality.¹³⁹ The Commission found that this process varied by storm and geographical area, with the utility and municipality working together to adjust operations based on local needs.¹⁴⁰ In addition, it may require hiring an electrician or certified inspector to certify that customer equipment is safe to reenergize.¹⁴¹ The Commission also learned through its investigation in one instance the cost component differed, with the utility and not the customer bearing the cost.¹⁴² The Commission found that these improvised responses led to customer confusion in the wake of severe flooding.¹⁴³

Small New York communities impacted by flooding can be subject to longer restoration times due to the limited numbers of building inspectors and electricians.¹⁴⁴ Pockets of isolated flood damage affecting small communities can potentially produce numerous disjointed and inconsistent inspection procedures, resulting in increased customer confusion and impacts to public safety. Immediately following Hurricane Irene localized flooding in Schoharie and Greene counties caused municipal officials to issue states of emergency.¹⁴⁵ With local laws temporarily suspended, the communities affected by catastrophic flooding worked with National Grid to develop an expedited inspection procedure.¹⁴⁶ Similarly, following Hurricane Sandy, the City of New York and Con Edison established an expedited inspection and self-certification process to rapidly restore power to customers.¹⁴⁷

Inspection programs should not be developed from scratch in response to a natural disaster. The Commission believes in the importance of unifying flood inspection procedures relative to damaged customer equipment statewide, which will offer a baseline approach to guide municipal inspection programs. This

¹³⁹ May 10, 2013 Interview with Director of Emergency Management, Schoharie County; Mayor John Borst, Albany Hearing Transcript at 91.

¹⁴⁰ IBEW Article.

¹⁴¹ Sept. 1, 2011 Information Sheet Given to Schoharie County Residents (NG_E_00299481) (information sheet concerned the requirement to “check with an electrician or inspection agency before turning your power on.”).

¹⁴² Sept. 1, 2011 Nat. Grid Electrical Inspections, Schoharie County (NG_E_00332633) (After Hurricane Irene, National Grid subsidized the cost of electricians performing home inspections in flooded areas through its energy economic development program); Nov. 7, 2012 Email re: RE Expedited Process for Customers Disconnected due to Damage (CE_0009761) (After Hurricane Sandy, Con Edison required customers to hire their own electricians to inspect and certify that their homes are ready to receive power).

¹⁴² Nov. 4, 2012 Email re: Need to Get Out Word (CE_0040268) (noting that customers are surprised to learn Con Edison will not reenergize them if their basements are flooded).

¹⁴³ Nov. 4, 2012 Email re: Need to Get Out Word (CE_0040268) (noting that customers are surprised to learn Con Edison will not reenergize them if their basements are flooded).

¹⁴⁴ April 23, 2013 Interview with Mayor of the Town of Schoharie and Department of Public Works (mentioning limited availability of resources).

¹⁴⁵ May 10, 2013 Interview with Director of Emergency Management, Schoharie County Interview; Denise Richardson, *Schoharie County Official Declares State of Emergency*, The Daily Star (April 29, 2011), available at <http://thedailystar.com/hurricaneirene/x151681357/Shoharie-County-official-declares-state-of-emergency> (confirming the existence of states of emergency in Schoharie and Greene counties following Hurricane Irene) (last accessed 6/19/2013); News10, *Update: Hurricane Irene relief in Greene County* (Sept. 2, 2011), available at <http://www.news10.com/story/15383862/update-hurricane-irene-relief-in-greene-county> (last accessed 6/19/2013).

¹⁴⁶ Sept. 1, 2011 Information Sheet Given to Schoharie County Residents (NG_E_00299482-84) (National Grid outlines instructions for electric inspection agencies in Middleburgh and Schoharie flooded areas following Hurricane Irene).

¹⁴⁷ See Section 7.5.1 for more information on Con Edison’s inspection and self-certification process for customers in hard hit flooded areas.

recommendation warrants further examination by the DOS and the New York City Department of Buildings (NYCDOB). To this end, the Commission recommends that the New York State and New York City Building Codes be amended to codify a uniform inspection and certification process to address damage to customers' electric equipment triggered by a severe weather event. As provided for in the State Building Code,¹⁴⁸ municipalities may elect to be more restrictive than the existing code, which would give local governments a framework for structuring flood inspections while also continuing to account for unique local needs. By way of example, Con Edison and Grid New York's inspection procedures addressing damage to customer equipment should be modeled as part of the rulemaking process.¹⁴⁹

Recommendation:

- **Amend New York State and New York City Building Codes to codify a uniform inspection and certification procedure relative to customers' damaged electric equipment that is triggered by a severe weather event.**

7.5 CON EDISON

Con Edison's service territory includes the majority of New York City and Westchester County. Over 900,000 customers in Con Edison's service territory suffered electric outages at the peak of Hurricane Sandy, representing approximately 27% of its customer base. Con Edison also experienced significant coastal flooding. The last customer not affected by flooding was restored 15 days after the storm made landfall.¹⁵⁰ In contrast, during Hurricane Irene, which did not produce significant flooding in Con Edison's service territory, approximately 200,000 customers lost power (with no outages in Manhattan), representing approximately 6 percent of its customers, and with the last customer restored eight days after the storm made landfall.¹⁵¹ The Commission's investigation of Con Edison uncovered numerous problems with its performance during Sandy. Con Edison's preparation for and response to flooding was inadequate, and prolonged the duration that customers were out of power. In addition, Con Edison struggled to develop accurate and timely ETRs during Hurricane Sandy, as slow damage assessment and technical problems forced Con Edison to use paper forms to transmit information from the field to engineering. In addition to the deficiencies in Con Edison's ETR communications, Con Edison's public outreach in general was often reactive rather than proactive, leaving many customers and local stakeholders confused and frustrated. Given the problems replete in Con Edison's storm performance, the Commission believes that Con Edison must seriously re-evaluate its storm preparation and response and adopt swift and substantive improvements before the next storm hits the region.

¹⁴⁸ 19 NYCRR Part 1203; NYS Division of Code Enforcement and Administration Website, *available at* http://www.dos.ny.gov/DCEA/About_DCEA.html (history and background information on the State Building Code) (*last accessed* 6/19/2013).

¹⁴⁹ Sept. 1, 2011 Information Sheet Given to Schoharie County Residents (NG_E_00299482) (describing National Grid's inspection programs for damage to customer equipment located in hard hit flooded areas); Nov. 7, 2012 Email re: Expedited Process for Customers Disconnected Due to Damage (CE_0009761); Nov. 7, 2012 Energy Services Flyer (CE_0009764) (describing Con Edison's inspection programs for damage to customer equipment located in hard hit flooded areas).

¹⁵⁰ Con Edison Sandy Part 105 Report at 9.

¹⁵¹ Consolidated Edison Company of New York, Inc. Report on Preparation and System Restoration Performance, Hurricane Irene August 27 through September 3, 2011 at 8, 16 (Nov. 14, 2011) [hereinafter Con Edison Irene Part 105 Report].

7.5.1 CON EDISON'S PREPARATION AND RESPONSE TO COASTAL FLOODING WAS INADEQUATE

The Commission's investigation found that prior to Hurricane Sandy, Con Edison was not adequately prepared to respond to a major storm event involving significant storm surge flooding. Con Edison was severely affected by coastal flooding during Hurricane Sandy, where around 30,000 of its customers experienced flood damage. Addressing and processing customers' damaged electric equipment proved problematic during Hurricane Sandy. Con Edison also faced significant flooding to its own equipment, including flooding that resulted in an explosion-like arcing of a piece of equipment in its East 13th Street Transmission Substation. Additional flooding resulted in the automatic shutdown of the East 13th Street and East River Transmission Substations, which caused the loss of power to over 220,000 customers in lower Manhattan. The Commission believes that Con Edison should have taken additional measures to prepare for and respond to the storm surge flooding experienced during Hurricane Sandy.

Con Edison Took Over a Week to Develop and Publicize an Effective Plan for Flooded Customers

Con Edison's storm plan did not have adequate procedures in place for preparing and responding to customer-owned equipment damage caused by coastal flooding. Con Edison relied on simply using their normal blue-sky procedures for flood restoration, which ultimately proved unmanageable due to the large number of customers flooded.¹⁵² According to a review of Company documents and interviews of Con Edison officials, Con Edison did not establish an effective flood plan until over a week after Sandy had passed.¹⁵³ As a result, Con Edison's initial plan for re-energizing flooded customer equipment was an *ad hoc* and inconsistent approach that varied depending on the service territory.¹⁵⁴ Because each affected service region (Brooklyn/Queens, Staten Island, and Manhattan) developed their own inspection and isolation process, there was no consistent company-wide process in place.¹⁵⁵ In addition, Con Edison's messaging regarding restoration of power to flood-affected areas was unclear well into the restoration period. Con Edison did not reach out to customers in flooded areas to inform them of a newly-revised and simpler certification process until November 7, 2012, which caused rampant customer confusion over what was needed to re-establish electric service.¹⁵⁶ Adding to the confusion, Con Edison's automated notifications to customers that their power would be restored on a particular day did not include any disclaimer or explanation that power *would not be restored* to customers whose equipment was damaged by flooding.¹⁵⁷

¹⁵² Con Edison's blue sky policy requires customers whose equipment was damaged (due to flooding or otherwise) to file a certificate of inspection with the New York City Department of Buildings before Con Edison would restore power. Nov. 4, 2012 Email re: Restricted properties (CE_0015921) ("In the absence of any emergency process for the restoration of electric service we will be following the established policy and require electricians to file electronically with the Department of Building.").

¹⁵³ The self-certification process that Con Edison ultimately adopted was approved by Con Edison management on or around November 4, 2012. Nov. 4, 2012 Email re: Damage Assessment & Power Restoration Task Force Meeting Notes (CE_0005366-67). Flyers informing customers of the revised policy were circulated on November 7.

¹⁵⁴ Mar. 27 & 30, 2013 Interview of Bob Schimmenti (Vice President of Planning and Engineering, Con Edison) [hereinafter Schimmenti Interview]; Nov. 4, 2012 Email re: Hard hit area concept/process (CE_0040276-77) (T. Karakatsanis, Con Edison General Manager of Electrical Operations for Brooklyn/Queens, emails Con Edison management, proposing that the Company come up with a "consistent process for all the areas").

¹⁵⁵ *Id.*

¹⁵⁶ Nov. 7, 2012 Email re: Expedited Process for Customers Disconnected due to Damage (CE_0009761-62).

¹⁵⁷ Mar. 20, 2013 Interview of Marilyn Caselli (Senior Vice President of Customer Operations, Con Edison) [hereinafter Caselli Interview] (confirming that erroneous automated calls were made to customers in flood zones); Nov. 3, 2012 Email re: FW: Notifications of Power Restoration (CE_0066709).

Con Edison Lacked Sufficient Resources to Address the Effects of Flooding to Customer Equipment

The Commission found that Con Edison was not prepared with either the manpower or the resources necessary to address the issues that arose from the significant flooding. Specifically, Con Edison did not have adequate staffing to conduct inspections of customer equipment following the flooding, a problem that was ultimately addressed when Con Edison hired 200 contract electricians to perform the inspections starting on November 9, 2012.¹⁵⁸ In addition, Con Edison did not have enough new or refurbished meters to re-establish service. The Commission was especially troubled to learn that the resource situation became so dire that it became a scramble to maintain a steady supply of meters to re-energize customers.¹⁵⁹

In addition, two types of meter isolation devices were used during Hurricane Sandy—a plastic disconnect boot and a green adapter plate. The Commission discovered that the use of the plastic disconnect boot had been discontinued three years prior to Hurricane Sandy due to associated fire hazards.¹⁶⁰ Despite the safety risks of the disconnect boot, Con Edison was forced to use them during Sandy because it lacked sufficient quantities of the safer green adapter plates. While the Commission did not find any specific harm caused by the disconnect boot during Hurricane Sandy, Con Edison's use of that device presented an unnecessary risk to customers and should be discontinued.

Con Edison Failed to Coordinate with Gas Suppliers prior to Reenergizing Customers

During its investigation, the Commission learned that Con Edison developed an inspection and self-certification process following Hurricane Sandy to reenergize its customers located in hard-hit flooded areas (e.g., parts of Brooklyn, Queens, Manhattan, and Staten Island).¹⁶¹ Con Edison developed this expedited process jointly with NYC Department of Buildings. As part of this process, customers with damage to their electrical equipment through various options could certify that it was safe for power to be restored to customers' homes.¹⁶² Once the certification was submitted to Con Edison, it proceeded towards power restoration. Particularly troublesome is that prior to restoring power to its customers, Con Edison did not coordinate with the customers' gas suppliers or communicate warnings to homeowners who were unaware of potential gas-related hazards.¹⁶³ Lack of coordination created potential for explosions, dangerous fires, and grave injuries if damaged gas equipment was not repaired at the time Con Edison restored electric services.

The City of New York (City) reached out to Con Edison in early November 2012 for the purpose of establishing Rapid Assessment Task Force teams to conduct home inspections in flooded areas.¹⁶⁴ The teams

¹⁵⁸ Nov. 9, 2012 Email re: SI briefing (CE_0016937-38).

¹⁵⁹ Nov. 6, 2012 Email re: FW: Question on Meters in Flooded Area & HELP (CE_0021309-12); Nov. 9, 2012 Email re: RE: Hardest Hit Communities Status 11_8 (CE_0053881-82); Nov. 10, 2012 Email re: Question on Meters in Flooded Area & HELP (CE_0021336-37).

¹⁶⁰ UWUA Position Paper (Feb. 2013); Mar. 12, 2013 Interview of Con Edison Union Workers.

¹⁶¹ Mar. 13, 2013 Interview of Won Choe (Staten Island Incident Commander, Con Edison) [hereinafter Choe Interview]; Mar. 15, 2013 Interview of Thomas Karakatsanis (Consolidated Edison General Manager of Electrical Operations) [hereinafter Karakatsanis Interview]; Schimmenti Interview; Nov. 7, 2012 Email re: Expedited Process for Customers Disconnected Due to Damage (CE_0009761); Nov. 7, 2012 Energy Services Flyer (CE_0009764) (describing a simpler inspection and certification process).

¹⁶² Oct. 30, 2012 Email re: DOB Electric (CE_0016482) and Nov. 2, 2012 Email re: Request from Mayor's Office (CE_0015843) (where NYC Department of Buildings evaluates and approves of Con Edison's inspection and self-certification program).

¹⁶³ Schimmenti Interview; Karakatsanis Interview.

¹⁶⁴ Nov. 5, 2012 Email re: NYC Agency Power, Gas and Water Restoration Task Force for Midland

were comprised of NYCOEM, Con Edison electric, National Grid gas division, water utility representatives, law enforcement, and the National Guard.¹⁶⁵ The intent was for this process to mirror the City-initiated response teams coordinated with LIPA in the Rockaways.¹⁶⁶

Con Edison continued to focus on implementing its own restoration plan-which was already underway-rather than pivoting to coordinate efforts with the City.¹⁶⁷ While Con Edison was moving forward with its own restoration plan, National Grid separately reached out to Con Edison to coordinate gas restoration efforts and, in turn, was forced to wait for a response.¹⁶⁸ Con Edison's uncoordinated parallel restoration efforts had the potential to threaten public safety since it did not fold National Grid's gas division into its restoration plan. While the response to a catastrophic natural disaster such as Hurricane Sandy is dynamic, it is essential for Con Edison and the City to align restoration efforts by including necessary partners like National Grid, especially when matters of public safety are involved.

The Commission determined through its investigation that OEM should replicate the use of its unified teams citywide in response to large-scale severe weather events and compel Con Edison's participation on these teams to safeguard against injuries to the public. The Commission further recommends the inclusion of a warning on Con Edison's electric customers' self-certification forms about the importance of customers ensuring their gas equipment has been inspected and repaired, where applicable, prior to their electricity being restored. The Commission ultimately found that Con Edison's failure to coordinate efforts with gas suppliers as part of the expedited inspection process is not only inexcusable, but also potentially dangerous.

Documenting Decisions to Preemptively De-energize Company Equipment

During Hurricane Sandy, Con Edison did not adequately document the decision-making process for de-energizing Company-owned electrical equipment. Con Edison's Corporate Coastal Storm Plan ("CCSP") did not require the adequate documentation of real-time decision-making regarding the preemptive shutdown of Con Edison electrical equipment. The CCSP, however, contemplated the need to make real-time decisions with respect to the preemptive shutdown of specific Con Edison equipment, such as networks or substations.¹⁶⁹ To inform this decision-making, Con Edison has water level sensing equipment at various

Beach (CE_0005409) (reporting that the Mayor's Office requested Con Edison participate in a multi-agency taskforce starting on November 6, similar to the taskforce the City put together with LIPA in the Rockaways).

¹⁶⁵ *Id.*

¹⁶⁶ As of November 5, 2012, the City of New York assembles 20 "unified teams" to canvas the Rockaways in coordination with LIPA/National Grid. Nov. 4, 2012 Email re: Damage Assessment & Power Restoration Task Force Meeting Notes (CE_0005366). Nov. 5, 2012 Email re: National Grid Hurricane Sandy Restoration Update (NG_E_00013048-50) (confirming the participation of LIPA/ National Grid representatives on the New York City unified response teams).

¹⁶⁷ One Con Edison employee described his conversation with a City official, "I also highlighted, that while we did want to work with the City, we didn't want to slow down our efforts to isolate houses where necessary." Nov. 6, 2012 Email re: Power Assessment Team (CE_0021305); Karakatsanis Interview; Nov. 3, 2012 Email re: Damage Assessment and Power Restoration Task Force Meeting (CE_0005324-25).

¹⁶⁸ Nov. 5-9, 2012 Email Chain (NG_E_00235422) (emails from National Grid representatives embedded in the State emergency control center describing on November 6, 2012 that "Coordination of National Grid and Con Ed joint restoration efforts still stalled" and on November 5, 2012 that "Con Ed has not yet provided us with a direct contact to coordinate our gas restoration, but SEMO representative believes they have been addressing the situation via their switching desk."). It is unclear if Con Edison ever responded to National Grid's request to coordinate gas restoration efforts following Hurricane Sandy.

¹⁶⁹ Con Edison Emergency Management Corporate Coastal Storm Plan, at §3.3(a) (Oct. 2012) [hereinafter CCSP] ("When it is apparent that continued operation will result in significant damage to facilities and equipment . . . actions will be taken to remove those facilities from service.")

critical, flood-prone locations. Con Edison also places human “spotters” at these locations to supervise and report on flooding conditions to the decision-makers at the various command and control centers.¹⁷⁰

The Commission found that Con Edison does not maintain a real-time log of the information that it receives from the field.¹⁷¹ Further, Con Edison does not maintain a record of the decision-making process leading to a potential shutdown.¹⁷² As a result, there is no written record available after a storm event to evaluate the facts on the ground when decisions are made to preemptively shut down—or not shut down—a network, area substation or a major transmission station (e.g., East 13th St.).

Con Edison’s Storm Plan Does Not Adequately Account for Variations in Storm Conditions

The Commission also found that Con Edison’s storm plan is too rigid and does not adequately account for varying storm conditions. The CCSP is designed to identify the possible effects of a coastal storm and prepare strategies to mitigate risks such as significant exposure to salt water. The CCSP is based on certain key assumptions, such as a storm surge level of up to 12 feet and wind speeds of between 111 and 135 miles per hour.¹⁷³ The CCSP does not, however, provide any guidelines that allow the user to augment or otherwise modify the plan to account for unique storm conditions that may exceed the plan’s underlying assumptions. For example, the CCSP’s staffing guidelines provide recommendations for increased staffing levels depending on the strength of the anticipated storm; however, these staffing guidelines cannot be scaled up to account for unique or extraordinary damage, such as the storm surge that occurred during Sandy.¹⁷⁴ Moreover, the CCSP’s staffing guidelines do not provide for a mechanism to calculate an increased need for wire guards following a hurricane, despite a prior recommendation by the DPS that all utilities “better define minimum staffing requirements . . . [and] identify alternate staffing levels when conditions, such as a hurricane, will likely cause an increase in the number of down wires.”¹⁷⁵

Recommendations:

- **Con Edison should revise its CCSP plan to include actions needed to prepare, respond and communicate effectively with all affected customers and other stakeholders in the event of widespread flooding.**
- **Discard all the discontinued meter isolation safety devices it may have in stock and replace its supply with the currently accepted model.**
- **Include in its revised coastal flood plan a Task Force with the responsibility for response to widespread flooding, including, and at a minimum, representatives from Con Edison, NYCDOB and the NYCOEM. In Con Edison’s service territory outside New York City, a similar approach should be used with the members to include the utility, the appropriate OEM staff, and the authority having jurisdiction in certifying electric services.**

¹⁷⁰ *Id.* at §3.3(h) (“Where installed, substation flood level indicators and/or on-site reports will be communicated to System Operations for use in determining the need for a station shutdown . . .”)

¹⁷¹ Mar. 5, 2013 Interview of Anita Ma (General Manager of Electrical Operations for Manhattan, Con Edison) [hereinafter Ma Interview].

¹⁷² *Id.*

¹⁷³ CCSP Development Timeline R9 (CE_0153918-25); Mar. 15, 2013 Interview of Carlos Torres (Vice President of Emergency Management, Con Edison) [hereinafter Torres Interview].

¹⁷⁴ *Id.*

¹⁷⁵ New York State Department of Public Service, *Utility Performance Report Following Hurricane Irene and Tropical Storm Lee*, at 50 (June 2012) [hereinafter DPS Irene/Lee Report].

- **Formalize in its storm plan the practice it used during Hurricane Sandy of seeking out licensed electricians or other trained inspectors to assist with the assessment and isolation of affected customers.**
- **Implement a record-keeping protocol for the facts and observations being used when deciding to preemptively shutdown or de-energize/isolate equipment to assist those who may be evaluating the decisions made or actions taken after the event.**
- **Con Edison’s planning guidelines must be flexible enough to allow real-time adjustment for more severe or unusual weather events.**
- **Coordinate efforts with the City of New York and National Grid gas to better align restoration activities following severe weather events.**
- **Include a warning on electric customers’ self-certification forms about the importance of ensuring customers’ gas equipment has been inspected and repaired, where applicable, prior to their electricity being restored.**

7.5.2 ETR PROBLEMS

Following Hurricane Sandy, Con Edison had difficulty estimating the scope of damage to its electric system in a timely and efficient manner.¹⁷⁶ The inefficiencies in Con Edison’s initial damage assessment process affected its ability to issue accurate ETRs in accordance with the DPS’s ETR guidelines.¹⁷⁷ Con Edison acknowledged that its own inability to obtain a sufficient number of site safety personnel early in the restoration process slowed the damage assessment process by forcing damage assessors to guard down wire locations for extended periods of time until being relieved by another employee.¹⁷⁸ The Commission also found that the ineffective use of available technology was one cause behind these damage assessment and ETR problems.

For example, Con Edison’s OMS (known as STAR) had never been tested to perform during a storm the size of Hurricane Sandy. Con Edison’s most recent storm drill simulated a storm that caused five times *less* damage than Hurricane Sandy.¹⁷⁹ In addition, Con Edison’s damage assessment and outage management systems were overwhelmed by the volume of users. As a result, STAR was unable to keep up with the volume of outages being reported, which forced Con Edison to take the system offline for an hour and a half to install a software update.¹⁸⁰ WebTrouble, software Con Edison uses to integrate its damage assessment with its work

¹⁷⁶ Con Edison has had difficulties in providing ETRs during other storms. New York State Department of Public Service, *February and March 2010 Storms A Report on Utility Performance*, at 3 (August 2010) [hereinafter DPS 2010 Feb/Mar. Storm Report].

¹⁷⁷ Miksad Transcript at 70:1-71:6 (“one of the most important pieces of information that [customers] expect to be communicated to them is an early and accurate estimate for restoration . . . we’ve struggled to get that kind of accuracy to our customers.”).

¹⁷⁸ Oct. 31, 2012 Email re: Re: Mariano Rivera (CE_0018164) (reporting that certain regions were using damage assessors (who were also in short supply) as site safety personnel, which drew the ire of Kevin Burke).

¹⁷⁹ Nov. 17, 2012 Email re: Fw: Con Edison's Preparation and Response to Hurricane Sandy - Rev 11-16-12 (CE_0058497).

¹⁸⁰ Oct. 30, 2012 Email re: FW: STAR Update (CE_0044413). In addition, a default setting in STAR led to the generation of some inaccurate ETRs early in the restoration process. STAR automatically generates an ETR upon the dispatch of *any* crews, regardless of whether crews are restoration or non-restoration (*i.e.*, damage assessment) crews. Because this feature, which was designed to be used during smaller activity levels, was

package process, also experienced a user volume overload and was not functioning as intended during Hurricane Sandy.¹⁸¹ Consequently, Con Edison was forced to use paper forms to transmit information between the damage assessment units and engineering.¹⁸²

In short, because Con Edison does not currently leverage use of technology in its damage assessment process, damage assessors do not have a way of communicating their assessment in real time to the planning and engineering divisions. Rather, damage assessors aggregate their data and submit it to the command center at the end of each shift, which not only slowed the ETR development process down but also unnecessarily delayed the damage assessment process.¹⁸³ Without the operational information necessary to generate a data-based ETR, Con Edison's process for generating an ETR is largely based on the experience of its employees as they review known system damages and conditions. A Con Edison executive stated during a Commission interview that "there's not much of a science to [the ETR generation process]."¹⁸⁴ As a result, the executive explained, Con Edison's global ETR is more of an internal goal than an actual "estimate" of the likely time it will need to achieve 90 percent restoration.¹⁸⁵ Even in the absence of real-time data, Con Edison could provide better estimates by making use of predictive analytics tools, which a Con Edison executive acknowledged in an interview with the Commission.¹⁸⁶ Finally, in a 2012 consultant report commissioned by Con Edison to review the outage management process, Accenture found that there was no field accountability of Con Edison's ETRs.¹⁸⁷ Specifically, Accenture found that Con Edison's restoration process does not consider the importance of meeting ETR commitments to customers.¹⁸⁸

Recommendation:

- **Better leverage available technology to improve the development and issuance of localized and individual ETRs.**

7.5.3 CON EDISON'S CREW ALLOCATION METHODOLOGY IS AD HOC

Because of its size and separate service regions, Con Edison must allocate any crews it receives as part of the contracting and mutual assistance process among its various operating divisions. The Commission found, however, that Con Edison's process for allocating these resources was not methodical and based on ad hoc criteria. In the absence of formal, agreed-upon protocols for crew allocation, Con Edison leadership allocates crews using less concrete criteria. For example, during Hurricane Sandy, it allocated crews to ensure that all service territories were restored at about the same time.¹⁸⁹ As its incident commander during Hurricane Sandy acknowledged, this consideration is in part practical, and in part political, stemming from Con Edison's desire to avoid a public perception that "there's a preferred class or preferred region" in the restoration

not deactivated during Sandy, false ETRs were generated which were "not going over well with the customers." Nov. 1, 2012 Email re: FW: Non Restoration crews (CE_0018167-68).

¹⁸¹ Choe Interview.

¹⁸² *Id.*

¹⁸³ Schimmenti Interview (noting that damage assessment is a "very manual" process and that Con Ed does not currently leverage technology in its assessment process, slowing the process down.).

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

¹⁸⁷ Accenture, *Outage Management Process & Technology Review: Final Report Review Draft Version 1.11* (Nov. 30, 2012) [hereinafter Accenture Report] (report of a review conducted by Accenture for Con Edison).

¹⁸⁸ *Id.*

¹⁸⁹ Miksad Transcript at 23-24.

process.¹⁹⁰ While this approach may allay public anger, it contributed to a sense within Con Edison's service territories that other areas were receiving more than their fair share of the crews given those areas' relative damage level.¹⁹¹

7.5.4 CON EDISON EXPERIENCED RESOURCE SHORTAGES

Specific Resource Shortages

Con Edison experienced numerous challenges with materials and it consistently had to address supply issues during Hurricane Sandy. This began with difficulty in timely obtaining a sufficient supply of sandbags and inflatable dams to fortify low-lying Con Edison infrastructure.¹⁹² The extensive flooding from the storm's tidal surge resulted in low supplies of large-volume water pumps and meters to replace those submerged as Con Edison did not anticipate the volume of water.¹⁹³ Fuel was another critical resource shortage. Critical restoration activities are not delayed where the refueling of line trucks is performed while workers are off-duty. Several Con Edison executives acknowledged, however, that the Company simply did not anticipate the fuel shortage that emerged a few days after the storm and as a result, it is neither a contingency in the CCSP nor simulated during emergency drills.¹⁹⁴

Con Edison maintains that the challenges it experienced trying to stay ahead of the supply curve did not hamper its restoration efforts in any way. However, this assertion is difficult to validate because Con Edison did a poor job tracking what resources were available at any given point in the restoration process and has not conducted any real-time or post-mortem analysis of the effects of supply shortages on its operations.¹⁹⁵ Con Edison also had difficulty tracking the location of mutual assistance field resources, taxing its ability to efficiently manage the crews' accommodations and deployment.¹⁹⁶

Working with the Government to Address Resource Shortages

To assist its ability to obtain additional resources, high-level Con Edison executives reached out to contacts within New York City, New York State, and the federal government. For example, to ensure continued operations, Federal Emergency Management Agency (FEMA) and the National Guard assisted Con Edison by providing additional fuel, and Con Edison changed its normal procedure to allow contractors and all

¹⁹⁰ *Id.* at 25.

¹⁹¹ Nov. 2, 2012 Email re: Resource Allocation (CE_0040367) (stating that B/Q has 39% of overhead customer outages but only 18% of mutual aid). Oct. 29, 2012 Email re: RE: Brighton Beach Network (CE_0081689) (where N. Caputo states to T. Karakatsanis, in response to report that all loops are down in Brooklyn: "The only good thing is that nobody gives a shit about what is happening here... all eyes on Manhattan.").

¹⁹² Oct. 28, 2012 Email re: B/Q Overhead System for Hurricane Sandy (CE_0021174-76) ("We will also need more sand bags by the morning. There is also a shortage on sand bags.").

¹⁹³ Nov. 3, 2012 Email re: A couple of items (CE_0055120-21) (referencing a request for pumps for water removal, and noting that "[t]hese items are becoming problematic.").

¹⁹⁴ Miksad Transcript at 81:1-10; Apr. 8, 2013 Craig Ivey (President, Con Edison) Hearing Transcript, at 68 [Hereinafter Ivey Transcript].

¹⁹⁵ Torres Interview; Miksad Transcript at 86:5-19; Ivey Transcript at 67. Per Accenture, resources (and crews) are tracked on too many spreadsheets, not centralized on a single resource/tracking system. Accenture Report at 11; Ivey Transcript at 59-60.

¹⁹⁶ Nov. 1, 2012, Email re: RE: Authorization to Proceed - Duke Energy (CE_0054986-87); Nov. 3, 2012 Email re: RE: Crewing Information (CE_0008044) (where Karakatsanis (General Manager of Electric Operations, Brooklyn/Queens, Con Ed) writes "If I knew what Mutual Aid I have as the B/Q Incident Commander, I would tell you."); Nov. 3, 2012 Email re: Mutual Aid Crews (CE_0016776) ("It does not appear that we have any way of knowing when crews have arrived. Another opportunity for a process improvement."); Nov. 9, 2012 Email re: RE: update (CE_0073257-58).

employees to refuel at its staging locations.¹⁹⁷ This change allowed damage assessors to spend more time evaluating conditions during a work shift. While the Commission recognizes the efforts put forth to date by the Governor's office to help remedy future fuel contingencies, all utility emergency plans should require utilities' fuel supplies in and around projected impact areas to be topped off and documented as part of the utilities' preparation activities.

This government outreach was done on an *ad hoc* basis. Con Edison should formalize the steps and contacts in the CCSP. In addition, a process should be established to interact with these agencies during non-storm periods to identify available resources and resolve concerns such that the request and provision of a resource is done efficiently.¹⁹⁸

Recommendation:

- **Formalize in the CCSP the steps it took during Hurricane Sandy to reach out to contacts within New York City, the State, and the federal government to aid in obtaining materials that were in short supply. Con Edison should interact with these agencies during non-storm periods to identify available resources and resolve concerns so any future requests and provisions of resources are done efficiently.**

7.5.5 CON EDISON NEEDS EARLIER, MORE PROACTIVE PUBLIC OUTREACH

Despite public commitments to place a greater emphasis on frequent and accurate communication, Con Edison did not meet stakeholder expectations when it came to its communication efforts during Hurricane Sandy. Con Edison was not proactive enough in its efforts to disseminate information to affected communities. Stakeholders wanted an earlier, more visible presence by Con Edison during the restoration efforts. For example, criticisms following a meeting in Westchester County regarding Con Edison's performance during Hurricane Sandy included: (1) liaisons assigned to municipalities lacked the ability to communicate specific information; (2) customer representative falsely told customers that electric service wouldn't be restored until the municipalities cleared trees; (3) customers received calls stating restoration date and time estimates *after* electric service was restored; (4) the outage map on Con Edison's website was inaccurate and did not show all customers out of service; and (5) customers purportedly called in outages but were told Con Edison had no record of their call.¹⁹⁹

Similarly, large commercial real estate landlords in Manhattan reported that Con Edison did not reach out to them before or after the storm. In order to obtain storm-related information, landlords had to call Con Edison themselves or get information through the New York Energy Consumer Council (NYECC).²⁰⁰ Additionally, when landlords called their account representatives within Con Edison (representatives assigned to deal with certain account and billing issues), the representatives could not route the landlords' call to the right

¹⁹⁷ *Id.* at 83:2-9 (“... I think scrambling is an accurate assessment... we were able to stay ahead, just barely, but we were able to stay ahead, and it was as a result of a lot of scrambling by a lot of people.”).

¹⁹⁸ Con Edison and the utility industry in general are looking into ways to address restoration material shortages through an analysis of optimal resource reserves or the creation of centralized stockpiles. Interviews with the Con Edison and EEI also indicated that as part of the mutual assistance process, the President of the United States personally addressed the industry and specifically requested barriers be removed to expedite movement of crews. Ivey Transcript at 48.

¹⁹⁹ Nov. 20, 2012 Email re: FW: Calls to Westchester Customers (CE_0045988-90).

²⁰⁰ Mar. 7, 2013 Interview of NYECC [hereinafter NYECC Interview].

operational contact. In the words of one NYECC official interviewed by the Commission: “what you knew [during Hurricane Sandy] depended on who you knew.”²⁰¹

Inaccurate Information Provided to Customers

During Hurricane Sandy, Con Edison on at least two occasions provided inaccurate information to its customers. On one occasion, individuals whose residences could not be re-energized due to flood damage to electrical equipment received robo-calls informing them that their power would be restored later that day.²⁰² In addition, Con Edison suffered problems with its website’s outage map during Hurricane Sandy. The outage map was at times inaccurate and became a source of frustration for customers.²⁰³ Another website problem involved an auto-generated message that would appear after customers reported an outage. The website stated that Con Edison was not aware of an outage in that area, which added to customer confusion about Con Edison situational awareness during storm restoration.²⁰⁴

7.5.6 LIAISONS LACKED ESSENTIAL INFORMATION TO BE MEANINGFUL RESOURCES TO LOCAL OFFICIALS

The Commission found that Con Edison did not provide sufficiently detailed information to local government officials. The information provided by Con Edison to government officials lacked the necessary operational details to aid in those officials’ decision making processes. The information provided to them on municipal conference calls was “boiler plate” and did not include much beyond anticipated restoration times—it was essentially the same information that was available on Con Edison’s website or by calling the customer service line.²⁰⁵

Because Con Edison did not provide sufficiently detailed operational information to local officials on its municipal conference calls, local officials had to reach out to municipal liaisons at Con Edison if they wanted more specific information.²⁰⁶ Con Edison assigned municipal liaisons to work with each community to facilitate road clearing and downed wire patrol, among other things. These liaisons, however, did not have the necessary information or direct lines of communication within Con Edison operations to obtain the information sought by the local officials. As one Con Edison employee stated, “. . . the liaisons are not being given the tools needed to provide the communication that the Municipalities are insisting on and that our executives have to [sic] commit to providing them.”²⁰⁷

7.5.7 CRITICAL INFRASTRUCTURE

Con Edison should better identify critical infrastructure facilities in coordination with local governments. Con Edison relies on the NYCOEM to identify critical infrastructure in Con Edison’s New York City service territory. In Westchester, however, Con Edison does not have a similar relationship with local municipalities.²⁰⁸ This causes a lack of consensus between government and Con Edison about what facilities

²⁰¹ *Id.*

²⁰² Nov. 3, 2012 Email re: FW: Notifications of Power Restoration (CE_0066709).

²⁰³ Caselli Interview; Nov. 30, 2012 Con Edison Takeaways from Meeting with Westchester Local Officials (CE_0046309).

²⁰⁴ Nov. 2, 2012 Email re: FW: STAR Web Service Data (CE_0018189-90).

²⁰⁵ NYECC Interview.

²⁰⁶ *Id.*; Mar. 4, 2013 Interview with the Deputy Commissioner of the Westchester County Department of Emergency Services, the Commissioner of the Westchester County Department of Energy Services, and the Director of the Westchester County Office of Emergency Management [hereinafter Westchester Interviews].

²⁰⁷ Nov. 6, 2012 Email re FW: Muni Liaison Calling Planner Dispatchers (CE_00151340).

²⁰⁸ Westchester Interviews.

are most important to local governments. Con Edison and local officials in Westchester need to work more closely to determine which facilities qualify as critical infrastructure and to coordinate the protection of those facilities during storm events.

Recommendation:

- **Coordinate with local governments immediately to identify critical infrastructure facilities and include these facilities on updated lists to be shared with municipalities.**

7.6 ORANGE AND ROCKLAND

O&R's service territory encompasses all of Rockland County and parts of Sullivan and Orange County. During Hurricane Sandy, approximately 145,000 customers in O&R's service territory experienced outages, representing around 66 percent of O&R's New York customer base. O&R's performance during Hurricane Sandy was fraught with problems. O&R was unable to issue consistent localized ETRs, which is a longstanding problem with this particular utility. In addition, O&R did not effectively coordinate wire down road clearing with local governments. The road clearing problems were exacerbated by the inadequacy of municipal liaisons, which were unable to give local public officials any meaningful information. O&R was also unable to effectively coordinate with Con Edison for resources despite both being sister companies under the Con Edison Inc. corporate umbrella. These investigative findings demonstrate O&R's need for serious improvement.

7.6.1 *RESOURCE SHARING BETWEEN O&R AND CON EDISON WAS INEFFICIENT, CAUSING CONFUSION AND DISORGANIZATION*

Consolidated Edison, Inc. (CEI) is the parent company of both Con Edison and O&R. Under the CEI corporate framework, Con Edison and O&R are sister companies and as such should be equals. They share a number of storm-related functions, such as weather reporting, distributing outside resources, and other emergency management functions. The "Shared Services" group within CEI's Emergency Management organization facilitates the management of shared services. Shared Services is responsible for fairly allocating outside resources between both O&R and Con Edison. The Commission has found serious flaws in the resource allocation process between O&R and Con Edison that caused confusion and disorganization prior to and during Hurricane Sandy.

Absence of a Formalized Decision-Making Process for Allocating Resources

Because Shared Services is responsible for the allocation of outside resources between sister companies O&R and Con Edison, it is imperative that resources be allocated appropriately. The Commission found that Shared Services did not have a methodical and consistent process for allocating resources between the two companies. Namely, there was no formal written procedure to guide Shared Services' allocation of resources between O&R and Con Edison.²⁰⁹ Rather, Shared Services seemed to make its allocation decisions on an *ad hoc* basis. The failure to have a formalized written protocol resulted in confusion and disorganization during the storm preparation and response period.

²⁰⁹ Mar. 27, 2013 Frank Peverly (VP of Operations, Orange and Rockland) Hearing Transcript at 63 [hereinafter Peverly Transcript] (stating that Shared Services did not have a formalized, written procedure for guiding resource allocation during Hurricane Sandy); Mar. 6, 2013 Interview of Ed Verbraak (Emergency Management Officer) [hereinafter Verbraak Interview] (stating that the allocation process was informal and that Shared Services did not have a set procedure for allocating outside resources).

For example, in the preparation period leading up to Hurricane Sandy, there was confusion and disorganization regarding crew allocation. Here, O&R was effectively left in the dark as to how many crews it would receive from Shared Services.²¹⁰ An email sent by an O&R executive just prior to Hurricane Sandy's landfall illustrates the frustration:

This is I think the 4th time I am asking for assistance for assessment and site safety. And while I have told [Con Edison] my staffing I cannot get staffing information from [Con Edison]. This much I know. I have 40 damage assessment personnel. Woefully inadequate for this storm. I know UPT has 40 contractors [Con Edison] locked in and will not release to us. I also know that [Con Edison] has at least 200 qualified damage assessment personnel. That means you have at least 6 times the resource [sic] I have.²¹¹

In addition, there was confusion within O&R over who was responsible for obtaining hoteling for utility crews. O&R thought that it was responsible for hoteling crews, whereas Shared Services thought that it was responsible.²¹² Emails between O&R executives and Shared Services' personnel demonstrate the confusion and frustration. When told by Shared Services that O&R was not responsible for obtaining hotels for crews, one O&R executive responded: "Well like everything else in this storm, if we are not taking care of ourselves no one else is. We are fully engaged in trying to get hotels."²¹³ The disorganization is further demonstrated in an email sent to Shared Services by an O&R executive: "If [Con Edison] is serious about treating O&R resource requirements as equals to Con Edison, we must start now. And recognize the hole you have me in now. If I have to get 200 hotel rooms I have to scramble a lot of internal resource [sic] when this all should have been addressed 2 days ago."²¹⁴ In another email to Shared Services about hoteling confusion, one O&R executive went so far as to state: "More and more I get the feeling we are an afterthought."²¹⁵

The pre-storm confusion was not limited to hoteling and crewing. O&R and Shared Services also experienced disorganization and confusion when it came to setting up staging areas for restoration crews. Shared Services served as the conduit for staging area setup between O&R and Con Edison. Here, Con Edison's needs were prioritized ahead of O&R's needs. Con Edison's staging areas were fully setup a day before Hurricane Sandy made landfall. O&R's staging sites, however, were not fully set up until the day the storm hit.²¹⁶ O&R

²¹⁰ Oct. 27, 2012 Email re: Mutual Aid (CE_0088788) ("There are still issues with distribution of resources, including site safety and damage assessment, that are not being addressed."); Oct. 27, 2012 Email re: External Crewing (CE_0088799) ("Am I reading this correctly i.e. [Con Edison] has 260 in house DA's and was assigned 260 additional contractors (total 520) and O&R has 40 in-house and was assigned 4 contractor crews (total 44)?? Similarly [Con Edison] would have 800 wire guards and O&R would have 205? I believe O&R will have more overhead damage from this event for a number of reasons but for now let's assume the damage will be equal."); Oct. 28, 2012 Email re: External Crewing (CE_0088799) ("Craig do you have any insight into the damage assessment situation? We're still sitting with 40+ while [Shared Services] brought [Con Edison] to over 500. I can't believe we're still talking about this but if they don't resolve it I'll give you a call.").

²¹¹ Oct. 27, 2012 Email re: Site Safety & Damage Assessment (CE_0039021).

²¹² Peverly Transcript at 39-40, 55 (acknowledging that there was confusion between Orange and Rockland officials and Shared Services officials regarding who was responsible for obtaining hotels for crews); Oct. 27, 2012 Email re: Hoteling (CE_0039022).

²¹³ Oct. 27, 2012 Email re: Hoteling (CE_0039022).

²¹⁴ Oct. 27, 2012 Email re: Site Safety & Damage Assessment Support (CE_0039021).

²¹⁵ *Id.*

²¹⁶ Peverly Transcript at 55-56 ("I didn't have my staging areas prepped to the degree I wanted them in advance of the storm. . . . I think it was Monday, if not Tuesday, it may have been Tuesday that I could say my staging areas were at a point or at a state of preparation . . .").

placed the blame for the staging area problems on Shared Services.²¹⁷ In a pre-storm email to Shared Services, an O&R executive expressed concern that Shared Services was not treating O&R equitably. “We have to remember that there should be equal concern granted to O&R as there is to Con Edison. This is unacceptable that O&R requirements continue to be side-lined in preference to Con Edison needs.”²¹⁸ O&R’s frustrations are symptomatic of the confusion and disorganization in the storm preparation stage prior to Hurricane Sandy.

Lack of Transparency in the Resource Allocation Process

Shared Services’ lack of transparency during the resource allocation process further contributed to the situation. A transparent exchange of resource information is essential to ensuring that Shared Services makes reasonable allocation decisions. Shared Services must know what O&R and Con Edison’s resource needs are before they can make an informed allocation decision. Here, Shared Services did not effectively manage the flow of staffing and resource information. Commission interviews with O&R executives confirmed that the resource information received from Shared Services and Con Edison was “incomplete” and contributed to the resource allocation confusion.²¹⁹ For example, O&R had given Con Edison their staffing information prior to the storm but was unable to get Con Edison’s staffing information in return.²²⁰ Moreover, by the time O&R received the relevant staffing data, Shared Services had already allocated crews.²²¹ Finally, the situation was so bad that, in the days before Hurricane Sandy, it took Shared Services over a day to respond to an O&R request for basic external crewing data.²²²

Perception of Inequality within O&R

The Commission found that O&R experienced inequitable treatment in prior storms, which contributed to their pre-Sandy concerns regarding resource allocation. High level O&R officials interviewed by the Commission stated that, during Hurricane Irene and the 2011 October Nor’easter, O&R experienced inequitable treatment from Shared Services.²²³ Further, after Hurricane Irene and the 2011 Nor’easter, O&R

²¹⁷ *Id.* at 56; Oct. 27, 2012 Email re: Logistics (CE_0023914) (“I did not set up the Shared Services arrangements but I am expecting and demanding equal treatment. The regulatory oversight will be extreme and we were already called out for inequities in the handling of shared services requirements in past State storm reports.”).

²¹⁸ Oct. 27, 2012 Email re: Logistics (CE_0023914).

²¹⁹ Peverly Transcript at 33-34 (explaining that the information that O&R was receiving was at times “incomplete”); Mar. 26, 2013 William Longhi (Chief Executive Officer and President of Orange and Rockland) Hearing Transcript, at 35, 36-37 [hereinafter Longhi Transcript] (stating that there was “just not a visible transparency to the [resource allocation process].”).

²²⁰ Peverly Transcript at 33-34 (when presented with Oct. 27, 2012 Email re: RE: Site Safety & Damage Assessment Support (CE_0039021), Peverly stated that the information he received was “incomplete” and was not useful in trying to determine his staffing needs).

²²¹ Longhi Transcript at 36-37 (“They had already allocated crews that we did not know about, so we were not dealing with the latest information. So part of that is to have the consistent, clear picture as to what the situation is, what the needs are and here is how the resources go.”).

²²² Oct. 28, 2012 Email re: External Crewing (CE_0088794) (“Strikes me as very unusual that all this info isn’t already together on one summary. Not sure how you could make any resource decisions without that????”); Oct. 28, 2012 Email re: External Crewing (CE_0088799) (“Two things scare me here, 1) why it took EM a day to put this table together for us since I can’t figure out how you could make resource decisions without it, and 2) how you could ever get to this distribution picture.”).

²²³ Longhi Transcript at 75-76 (when asked what this perception of inequality was based on, Longhi stated that “it was based on some of the experiences we had had with Irene and the snowstorm. . . .”); Peverly Transcript at 44 (stating that it was the October 2011 “snow storm that the first conference calls were taking

had high-level discussions with Con Edison and Shared Services' personnel about O&R's concerns.²²⁴ In addition, the DPS also identified potential disparities in resource allocation in their *2011 October Nor'easter Report*. Here, the DPS specifically noted the disparity of site safety personnel between Con Edison and O&R.²²⁵ The DPS recommended that this disparity be reviewed by both companies to "ensure that the Companies' responses are adequate and generally consistent with each other."²²⁶

The Commission's investigation determined that the inadequate information flow and the lack of transparency in resource allocation contributed, in part, to O&R's belief during Hurricane Sandy that Shared Services conferred preferential treatment to Con Edison. In Commission interviews, a number of high-level O&R executives acknowledged this perception within their company.²²⁷ Moreover, these executives further acknowledged in interviews with the Commission that they themselves shared the perceptions of inequality between the two sister companies.²²⁸ Prior to Hurricane Sandy, one O&R executive went so far as to warn Shared Services and Emergency Management against unfair treatment as previously experienced. In an email sent a few days prior to Hurricane Sandy, the O&R executive warned:

During the 2001 [sic] storms I had higher-level Con Edison folks communicate to me their observations that O&R was lucky to be an afterthought in the CERC/Corporate support process. We felt that from O&R and it was supported by clear cases e.g. CERC ordered dry ice for [Con Edison] per PSC filed requirements and didn't order any for O&R. I really appreciate your efforts on this since we can't afford to have a repeat of the 2011 storms.²²⁹

In another email just prior to Hurricane Sandy, an O&R executive expressed frustration at the slanted focus of Shared Services: "FYI. The next big action to take in the storm process is in Shared Services. It is all [Con Edison] focused."²³⁰ Senior O&R officials shared these concerns with Shared Services and Con Edison up until the day before Hurricane Sandy hit. Despite prior DPS recommendations and O&R's internal concerns, it does not appear that the concerns over inequitable treatment were ever resolved prior to Hurricane Sandy.

place with the then vice president, Bob, and Carlos and that would have arisen from a concern that the distribution stays equitable based upon the scope and magnitude of damage.").

²²⁴ Peverly Transcript at 44 (noting that conference calls took place between O&R, Con Edison, and Shared Services' executives); Longhi Transcript at 78 (stating that between Irene and the 2011 Nor'easter, "there was a lot of discussion about the need to provide, you know, to make sure that there was equal support given to both companies and that that was important for us to monitor. So I guess my feeling here was, I wanted to feel better that we had addressed this issue, but I still had some doubts, and my people were voicing some concerns . . .").

²²⁵ DPS 2011 Oct. Nor'easter Report at 20-21 (further noting that resources should be adequate and fairly consistent across the two companies for "all aspects of restoration, including crewing, damage assessment, and communication functions.").

²²⁶ *Id.*

²²⁷ Longhi Transcript at 75-76 (explaining that the perception was that "you had to speak up or you had to be sort of at the table and be vocal in order to assure what we felt was a reasonable distribution."); Peverly Transcript at 43-44 (acknowledging that O&R's concerns that "it wasn't an equitable distribution" prior to Hurricane Sandy).

²²⁸ Peverly Transcript at 43-44 (acknowledging that these were concerns that Peverly shared prior to Sandy); Longhi Transcript at 75-76 (acknowledging that Longhi shared these concerns prior to Sandy).

²²⁹ Oct. 27, 2012 Email re: Logistics (CE_0146774).

²³⁰ *Id.*

Recommendations:

- **Shared Services Group should formalize procedures for allocating resources between O&R and Con Edison. The procedure should define how to allocate crews prior to the storm's impact and how the allocation will be modified as restoration occurs. Dedicate personnel to be part of the Shared Services' team during storm events. This will ensure that O&R is adequately represented at the resources table.**
- **Develop a comprehensive reporting structure that lists all regions and contains information regarding current resource allocations, where incoming resources are to be placed and why, and the level of outstanding resource requests.**

7.6.2 O&R WAS UNABLE TO ISSUE LOCALIZED ETRs

The lack of specific and granular ETRs was particularly problematic for O&R during Hurricane Sandy.²³¹ O&R issued global ETRs for a significant part of the restoration period. O&R was eventually able to issue regional and county ETRs, but even those numbers were largely the same as the global ETRs.²³² It was only towards the end of the restoration period that O&R was able to develop and issue localized or individual ETRs.²³³ Interviews with O&R officials underscore the problems in this area. In an interview with the Commission, a high level O&R executive called the lack of localized ETRs a “systemic” problem that everyone within the company was aware of.²³⁴ Other interviews with O&R executives confirmed O&R's localized ETR problems during Hurricane Sandy.²³⁵ This lack of consistent localized ETRs promoted customer uncertainty and contributed to the frustration that many felt during the Hurricane Sandy storm restoration period.

O&R's History of ETR Problems

O&R has a well-documented history of ETR problems, which is particularly troubling given their ETR problems during Hurricane Sandy. The DPS has recommended in three prior storms that O&R improve their development and issuance of granular ETRs. After Hurricane Irene and Tropical Storm Lee, the DPS found that O&R not only failed to issue reliable localized and individual ETRs, but their local ETRs reflected the same numbers as their county/regional ETRs. “Local ETRs reflected the same times as their respective county ETRs, indicating that the Company did not perform as complete of an analysis to determine the most accurate ETRs possible.”²³⁶ The DPS identified similar problems during the 2011 October Nor'easter. Here, the DPS found that every utility, except O&R, maintained effective communications with their customers. The crux of O&R's communications problems stemmed from the “lack of detailed information, particularly

²³¹ Global ETRs are estimated times of when the utilities' entire service territory will be restored. Regional ETRs are often ETRs for the particular counties or operating divisions within that service territory. The more granular ETRs, such as localized and individual ETRs, are estimated times of restoration for specific towns and individual customers.

²³² Orange and Rockland Report on Preparation and System Restoration Performance, October 29 through November 4, 2011 Snow Storm, at 30-33 (January 9, 2012) [hereinafter Orange and Rockland Sandy Part 105 Report] (showing that two out of the three New York counties had the same ETRs as the global ETR).

²³³ Mar. 11, 2013 Interview of Angelo Regan (Director of Electrical Engineering, Orange and Rockland) [hereinafter Regan Interview]; Mar. 3, 2013 Interview of Tom Brizzolara (Director of Public Affairs, Orange and Rockland) [hereinafter Brizzolara Interview]; Verbraak Interview.

²³⁴ Brizzolara Interview.

²³⁵ Verbraak Interview; Regan Interview.

²³⁶ DPS Irene/Lee Report at 61.

regional and localized ETRs,” which “reduced the effectiveness of this effort in meeting customer needs.”²³⁷ Finally, after the February and March 2010 storms, the DPS again found serious problems with O&R’s development of localized ETRs. “For a Company to wait until the last day of restoration to provide localized information is not acceptable and shows a poor understanding of the importance of this information.”²³⁸ The DPS recommended that O&R modify its emergency response procedure to require the timely development of localized and global ETRs.²³⁹ As evident during Hurricane Sandy, O&R has continually failed to improve their ETR development performance despite prior DPS recommendations.

O&R asserted that moving to a decentralized restoration model complicated its ability to develop granular and reliable ETRs. Still, it appears the utility failed to disseminate the information it was able to develop about service restoration. Although the utility says that it disseminated a substation-specific ETR, the Commission’s investigation did not find evidence that O&R effectively passed on this information to communities. As a result, the public had no alternative but to rely on less specific ETRs.

Recommendation:

- **Improve the ability to develop localized and individual ETRs when using a decentralized restoration model.**

7.6.3 O&R’S OUTAGE MAP WAS INACCURATE AND SUFFERED GLITCHES

O&R suffered problems with its website’s outage map during Hurricane Sandy. Specifically, O&R’s outage map often showed incorrect ETRs and suffered a number of glitches that affected its functionality.²⁴⁰ Further, O&R purported to update its outage map every 15 minutes, which they ultimately admitted was too ambitious of a task.²⁴¹ Updating the outage map less frequently was one of O&R’s lessons learned from Hurricane Sandy.²⁴² The problems with O&R’s outage map contributed to customer confusion and made coordination with government more difficult.

Recommendation:

- **Improve the functionality of the public website’s outage map, including the accuracy of information posted. O&R should also develop a consistent and effective method for updating the outage map during storm events.**

²³⁷ New York State Department of Public Service, *Utility Performance Report Following 2011 October Nor’easter*, at 9 (Jun. 28, 2012) [hereinafter DPS 2011 Oct. Nor’easter Report].

²³⁸ DPS 2010 Feb/Mar. Storm Report, at 64.

²³⁹ *Id.*

²⁴⁰ Jan. 24, 2013 Interview of Ben Dunton (DPS) [hereinafter Dunton Interview]; Jan. 18, 2013 Interview of Clarkstown Officials [hereinafter Clarkstown Interview]; Nov. 3, 2012 O&R Email Exchange re: outage map (CE_0020349); Nov. 1, 2012 Patrick Burke Email re: Peverly Talking Points (CE_0009305-9306) (“O&R’s Outage Map is temporarily out of service. We are working on the problem and expect to resolve it as soon as possible.”); Nov. 1, 2012 Peverly Talking Points (CE_0009306) (“PLEASE NOTE: Due to technical difficulties, O&R’s Outage Map is temporarily out of service. We are working on the problem and expect to resolve it as soon as possible.”); O&R Customer Complaints re: the outage map problems (CE_0058745; CE_0058005; CE_0058010; CE_0058747; CE_0058836).

²⁴¹ Orange and Rockland Sandy Part 105 Filing, at 39.

²⁴² *Id.*

7.6.4 O&R DID NOT EFFECTIVELY COORDINATE WIRES DOWN WITH LOCAL GOVERNMENTS

O&R did not effectively coordinate with local governments on road clearing during Hurricane Sandy. O&R's road clearing procedure is encompassed in the Priority Restoration Group (PRG), which is a protocol dedicated to road clearing and other priority incidents. After Irene and the 2011 October Nor'easter, the DPS recommended that O&R formalize a unified protocol for road clearing, coordinating with local government, and responding to priority incidents.²⁴³ The PRG was developed in the wake of the DPS's recommendation that O&R promulgate a formal road clearing and down wire policy. The Commission found that O&R's PRG road clearing procedure was never formalized prior to Sandy.²⁴⁴

During Hurricane Sandy, the problems inherent in O&R's PRG road clearing procedure became evident. O&R suffered coordination and dispatching problems. O&R crews dispatched to clear roads were at times late and sometimes simply did not show up at all.²⁴⁵ As a result, local government crews were often forced to stand by down wires waiting for O&R crews to arrive.²⁴⁶ Despite the fact that O&R's road clearing policy specifically requires it to update local government officials on the progress of road clearing activities, O&R did not consistently track the progress of road clearing jobs.²⁴⁷ Local officials were often not updated or informed of the progress of road clearing efforts.²⁴⁸ Consequently, local government officials were at times forced to unnecessarily dispatch municipal employees to jobs that were either already completed or were close to completion.²⁴⁹ Finally, O&R did not dedicate enough crews to support its road clearing efforts. During Hurricane Sandy, there were approximately 12-14 crews assigned to the PRG for road clearing.²⁵⁰ These 12-14 crews were dedicated to the entire O&R service territory, which includes over 90 municipalities. The Commission found that only 12-14 crews were inadequate to both repair over 6,000 down wires and perform road clearing tasks effectively.²⁵¹

O&R's road clearing problems forced them to modify their road clearing procedure a few days into the storm restoration period.²⁵² Here, O&R realized that its road clearing strategy was overmatched and unable to deal with the over 6,000 wires down in the service territory.²⁵³ The situation deteriorated to the point where O&R scheduled a meeting with a number of local highway superintendents in New City a few days into the storm response just to deal with the local outrage over O&R's road clearing practices.²⁵⁴

²⁴³ New York State Public Service Commission, In the Matter of the Outages Caused by Hurricane Irene and Tropical Storm Lee, Case 11-M-0481, at 13 (June 2012).

²⁴⁴ Orange and Rockland Response to Moreland Subpoena Q12 ("Although the Company has not yet formally adopted this procedure, the Company did follow this procedure during Hurricane Sandy.").

²⁴⁵ Brizzolara Interview; Peverly Transcript at 92-93, 94; Oct. 31, 2012 Email re: Muni Crews (CE_0050527); Clarkstown Interview.

²⁴⁶ Clarkstown Interview.

²⁴⁷ Brizzolara Interview; Peverly Transcript at 100-101, 102; Nov. 3, 2012 Email re: FW: Hurricane Sandy - Clarkstown (CE_0009340); Clarkstown Interview.

²⁴⁸ Clarkstown Interview; Peverly Transcript at 100-101.

²⁴⁹ Clarkstown Interview.

²⁵⁰ Brizzolara Interview (acknowledging that there were only 12-14 crews dedicated to PRG road clearing efforts); Orange and Rockland Response to Moreland Subpoena Q12 (O&R's draft PRG policy calls for a maximum of 8 crews in the event of 160,000 trouble calls); Peverly Transcript at 96 (acknowledging that the PRG did not have enough crews); Nov. 15, 2012 Email re: Storm Critique (CE_0124001) (Not enough muni crews to meet the municipalities needs).

²⁵¹ *Id.*

²⁵² Brizzolara Interview; Peverly Transcript at 87.

²⁵³ Brizzolara Interview; Peverly Transcript at 87-89.

²⁵⁴ Brizzolara Interview; Peverly Transcript at 87.

O&R's road clearing problems during Hurricane Sandy are concerning given their prior problems with down wires during Hurricane Irene.²⁵⁵ Here, the DPS recommended that O&R improve their wire down and road clearing procedures, including specifying down wire classifications, developing procedures to enhance down wire communications with customers, and improving the tracking of down wires.²⁵⁶ Given the problems experienced with the PRG during Hurricane Sandy and the prior DPS recommendations, O&R must improve their down wire and road clearing operations.

Recommendations:

- **Dedicate additional line crews to road clearing operations. This will allow O&R to better coordinate road clearing and other priority incidents with local governments.**
- **Expand and improve road clearing training in accordance with the PRG road clearing policy, including training and coordination with local governments.**
- **Track the progress of road clearing jobs and continually update local governments on the progress of those jobs during storm events. Local governments should be notified when a particular incident has been resolved.**

7.6.5 O&R'S MUNICIPAL LIAISONS WERE LARGELY INEFFECTIVE

O&R has a Community Response Team (CRT) that acts as liaisons with municipal and county governments. O&R will send CRT representatives to county and local emergency operations centers (EOCs) during storm conditions to serve as on-the-scene liaisons to the utility company. The CRT, however, was largely ineffective and understaffed for a storm the size of Hurricane Sandy.²⁵⁷ In the months leading up to Sandy, high-level O&R executives were informed about this staffing inadequacy.²⁵⁸ Despite these warnings, O&R failed to fix the problem prior to Hurricane Sandy. O&R has indicated that it is again reviewing the CRT staffing issue in the wake of Hurricane Sandy.²⁵⁹

In addition, the Commission's investigation revealed deficiencies with the quality of information representatives from O&R's CRT were able to give to municipalities. Namely, CRT representatives were able to take information in but they were unable to give any out.²⁶⁰ This left local governments in the dark and defeated one of the main purposes of the CRT program, which was to act as a point person for both the utility company and local government during storm events.

Recommendation:

- **Identify and cross-train workforce to fix inadequacies in CRT staffing levels. Improve the ability of CRT representatives to provide more meaningful information to local governments. CRT representatives should also be better prepared to help local governments elevate incidents during storm events.**

²⁵⁵ In the Matter of the Outages Caused by Hurricane Irene and Tropical Storm Lee, 13.

²⁵⁶ *Id.*

²⁵⁷ Brizzolara Interview; November 15, 2012 Email re: RE: Flip Chart Notes from O&R CPC Mtg 11/13/12 (CE_0124001).

²⁵⁸ Peverly Transcript at 107; Mar. 6, 2013 Interview of Neil Winter (Community Response Team, Orange and Rockland) [hereinafter Winter Interview].

²⁵⁹ Winter Interview; Brizzolara Interview; Peverly Transcript at 106.

²⁶⁰ Peverly Transcript at 104; Clarkstown Interview.

7.6.6 HOUSING OF FOREIGN CREWS

Like other utilities during Hurricane Sandy, O&R had problems housing foreign crews. Because of hotel shortages in the area and the Army vs. Air Force football game, O&R was forced to house crews in locations far from work sites.²⁶¹ For example, foreign crews were housed in locations as far as Albany and Trenton.²⁶² This forced foreign crews to travel great distances to get to work sites, which made the restoration process less efficient. During interviews with the Commission, O&R indicated that it is exploring the use of tent staging areas for housing foreign crews.²⁶³ This is a step in the right direction and O&R should continue to improve its capacity to house foreign crews.

Recommendation:

- **Better prepare for housing foreign crews during major storm events. O&R should explore the potential for using base camps to house foreign crews where hotels or other forms of housing are unavailable within the restoration area.**

7.7 NYSEG AND RG&E

The Commission conducted a joint investigation of NYSEG and RG&E because both companies are subsidiaries of Iberdrola USA and share a number of storm responsibilities. During Hurricane Sandy, approximately 117,000 customers in NYSEG's service territory suffered outages, representing 14 percent of NYSEG's customer base.²⁶⁴ In addition, NYSEG's Brewster operating division was especially devastated during Sandy, where about 90 percent of customers lost power. NYSEG's Brewster division was also hit particularly hard during Hurricane Irene, where 71 percent of customers lost power.²⁶⁵ RG&E suffered significantly less damage than NYSEG during Sandy. Approximately 26,600 customers in RG&E's service territory lost power during Hurricane Sandy, which represented only 7 percent of RG&E's customer base.

The Commission has uncovered problems with NYSEG/RG&E's performance during Hurricane Sandy. For instance, NYSEG was unable to issue timely localized ETRs, which was in part because of its delayed damage assessment. In addition, NYSEG's municipal liaisons were largely ineffective and unprepared for the dealing with a storm event of such magnitude. An inadequate level of training and experience impacted their coordination with local government and at times disrupted the information flow to municipal leaders. NYSEG also experienced staffing and resource shortages, which affected its ability to adequately perform during the storm. Finally, NYSEG/RG&E did not have a master list of critical infrastructure facilities

7.7.1 LACK OF LOCALIZED ETRs AND DELAYED DAMAGE ASSESSMENT

NYSEG had problems providing timely localized ETRs to customers within its Brewster service territory during Hurricane Sandy.²⁶⁶ NYSEG provided ETRs for each of its operating divisions, but seemed unwilling or

²⁶¹ Verbraak Interview; Longhi Transcript at 73-74.

²⁶² Longhi Transcript at 73-74.

²⁶³ Verbraak Interview.

²⁶⁴ New York State Electric & Gas / Rochester Gas and Electric, Part 105 Hurricane Sandy Storm Report, October – November 2012, at 31 (Jan. 2, 2013) [hereinafter NYSEG Sandy Part 105 Report] and Appendix D.

²⁶⁵ New York State Electric & Gas / Rochester Gas and Electric, Hurricane Irene and Tropical Storm Lee Report, at 13 (Nov. 28, 2011) [hereinafter NYSEG Irene Part 105 Report].

²⁶⁶ Nov. 3, 2012 Email RE: NYSEG Outage (NYSEG-RGE 00021089) and Nov. 3, 2012 Email Fwd: How's it going? (NYSEG-RGE 00021183) (customers asking for an accurate ETR after Hurricane Sandy). Internal Memorandum: Hurricane Sandy Initial De-Brief (NYSEG-RGE 00024994) (acknowledging that "ERT's are another continuing cause of complaints and concerns from customers and public officials.").

unable to provide more granular ETRs early in the restoration process.²⁶⁷ While the customers in the rest of NSYEG's service territory were receiving localized ETRs, customers in NYSEG's Brewster division were shut out from receiving information on restoration times.²⁶⁸ Rather, NYSEG's outage map simply stated "assessing" when customers checked to find ETRs for the Brewster division.²⁶⁹ NYSEG did not establish any internal deadline to convert the message that they were "assessing" the situation on their website.²⁷⁰ In addition, customers in NYSEG's Brewster Division also had problems receiving accurate and up-to-date ETRs.²⁷¹ According to one government official interviewed by the Commission, ETRs kept getting pushed back in NYSEG's Brewster division.²⁷²

NYSEG's slow damage assessment process also contributed to its failure to provide timely localized ETRs.²⁷³ According to one local government official, NYSEG conducted very little damage assessment on the first day of restoration, which was based in large part on the utility's reliance on the use of aerial patrols as a primary means to assess damage to its overhead system.²⁷⁴ Due to high winds for the first 24-36 hours following Hurricane Sandy, NYSEG's aerial patrols were grounded and very limited damage assessment occurred.²⁷⁵ NYSEG decided to employ a "boots on the ground" damage assessment strategy, which required NYSEG employees and contractors to walk the lines.²⁷⁶ NYSEG did not begin damage assessment until sometime on the second day following Hurricane Sandy. NYSEG's insufficient vegetation management along its transmission rights-of-way further complicated this damage assessment process.²⁷⁷

The calculated delays not only affected the utility's ability to develop and communicate ETRs to its customers in Brewster, but also ultimately resulted in restoration delays. The Commission notes that NYSEG has been

²⁶⁷ January 25, 2013 Interview with Town of Dover Supervisor [hereinafter Dover Interview].

²⁶⁸ *Id.*; January 23, 2013 Interview with North Salem Town Supervisor, Highway Superintendent, and Highway Manager [hereinafter North Salem Interview] (describing how residents in the Town of North Salem were unable to access NYSEG's call center to obtain additional information.); Nov. 4, 2012 Memo #3 from NYSEG to Commissioner James LaRocca, Public Services Commission (NYSEG-RGE 00033338) (documenting call volumes and customer satisfaction rates, which reflect the conditions in North Salem as an apparent anomaly in NYSEG's Brewster service territory).

²⁶⁹ Mar. 21, 2013 Interview of Jim Salmon (Manager, Regional Outreach & Development/PLO at NYSEG) [hereinafter Salmon Interview].

²⁷⁰ Salmon Interview.

²⁷¹ Dover Interview (explaining that ETRs kept getting pushed back); Mar. 15, 2013 Interview of Walter Matyjas (Vice President, Transmission and Distribution Iberdrola USA) [hereinafter Matyjas Interview].

²⁷² Dover Interview.

²⁷³ Lynch Transcript, at 203-204 (noting that "[w]hen you come up with a global E.T.R., you -- you want to be somewhat conservative."); April 4, 2013 Kevin Walker (Chief Operating Officer, Iberdrola USA) [hereinafter Walker Transcript] Hearing Transcript, at 82 (acknowledging that "the transmission piece will give you a global. Then you have to do your distribution piece to get you more of the regional and the local E.T.R.s."); Dover Interview.

²⁷⁴ Dover Interview.

²⁷⁵ Matyjas interview.

²⁷⁶ *Id.*; January 24, 2013 Interview of Paul Tartaglia (Senior Vice President of Energy Resource Management, NYPA) [hereinafter Tartaglia Interview]. Nov. 1, 2012 E-mail FWD: NYSEG (NYSEG-RGE 00033292) (Tartaglia communicated to other NYPA officials that NYSEG's delays in starting damage assessment were due to grounded helicopter patrols).

²⁷⁷ Moreland Staff physically inspected the Brewster area and made this determination on May 23, 2013. Staff was unable to access much of NYSEG's transmission rights-of-way due to downed trees and debris, and therefore concluded that NYSEG's vegetation in this area was wholly inadequate. [hereinafter Moreland Staff at Brewster]. March 22, 2013 Interview of Bill Ransom (Director of Asset Management and Maintenance for Iberdrola USA).

criticized in the past – most recently in June of 2012 – for its delay in issuing ETRs.²⁷⁸ The DPS staff noted that NYSEG did not issue ETRs for its Liberty and Mechanicville Divisions until the day that service was restored to the remaining 443 customers out of service, and that the establishment of ETRs for these Divisions on the day service was restored provided no benefit to customers affected.²⁷⁹ The DPS staff further noted that NYSEG experienced delays in quickly obtaining crews and establishing regional ETRs during Hurricane Irene, and that ETRs for the Brewster Division changed multiple times.²⁸⁰ For those areas where damage does not track municipal or Division boundaries, the DPS staff recommended that NYSEG consider breaking the region into smaller and more manageable geographic based units.²⁸¹ DPS staff assigned to Brewster also noted that the Company should have had a more robust backup damage assessment plan in place for when aerial damage assessment is delayed or unavailable.²⁸² That shortfall resulted in customers in Brewster having to wait longer for their lights to be turned back on and for their lives to resume normalcy. NYSEG needs to improve both its damage assessment functions and its ability to generate granular localized ETRs during storm events

Recommendations:

- **Improve the speed of damage assessment to ensure that accurate ETRs are timely developed.**
- **Develop contingency plans for conducting efficient damage assessment where aerial patrols are not possible.**

7.7.2 LIAISONS WERE NOT ADEQUATELY PREPARED FOR STORM CONDITIONS DURING HURRICANE SANDY

NYSEG experienced significant problems with its municipal liaisons during Hurricane Sandy. NYSEG's municipal liaisons were not prepared for the storm conditions during Hurricane Sandy. The Commission found that many of NYSEG's liaisons did not have remote access to email or the internet, which limited their communication capabilities.²⁸³ Further, municipal liaisons did not have the capability to generate customer outage or OMS tickets themselves and had to call the information into the Brewster command center.²⁸⁴

NYSEG also acknowledged the need to improve its training program for municipal liaisons.²⁸⁵ For example, the liaisons assigned to local areas were not always familiar with the particular area.²⁸⁶ NYSEG/RG&E mobilized staff from its Rochester and Binghamton offices and Iberdrola USA moved staff from Maine to supplement services and lack of available staffing in Brewster. These liaisons were only given minimal background information about the system where they were assigned and many lacked pre-storm

²⁷⁸ New York State Public Service Commission, Utility Performance Report Following the October 2011 Northeaster, Case 11-M-0595, at 24 (June 28, 2012).

²⁷⁹ *Id.* The DPS staff recommended that NYSEG submit a report identifying the actions it will take, and the verification process it will use to ensure that all ETRs will be issued in a timely manner.

²⁸⁰ DPS Irene/Lee Report, at 60, 61.

²⁸¹ *Id.*

²⁸² Jan. 16, 2013 Interview of Tom Dvorsky (DPS) [hereinafter Dvorsky Interview].

²⁸³ Salmon Interview.

²⁸⁴ Lynch Transcript at 174:2-13.

²⁸⁵ Walker Transcript, at 28 ("I'm sure that there's going to be certain people at the end of that process or maybe in the middle, we say, you know, this is just not a – a fit for you and we're going to have to bring in others...").

²⁸⁶ Jan. 23, 2013 Interview of Town of Somers Supervisor [hereinafter Somers Interview].

relationships with the local government officials.²⁸⁷ The Commission also found that the support system for NYSEG's Public Liaison Officer was inadequate and inefficient.²⁸⁸ The Public Liaison Officer is the primary point of contact for towns and counties in NYSEG's service territory. In a Commission interview, a high level NYSEG liaison official stated that he was overworked because he did not have enough personnel below him.²⁸⁹

In addition, NYSEG's liaisons were often incapable of providing any more information than was displayed to the general public on the company's website. In an interview with the Commission, one local government official reported delays in receiving information from NYSEG's liaisons.²⁹⁰ This local official stated that often times the information NYSEG provided was nothing different from what was already on NYSEG's website.²⁹¹ This calls into question the basic need of a municipal liaison when the municipality can access the utility's website on its own to obtain restoration and outage information.

At the suggestion of the Governor's office, New York Power Authority (NYPA) personnel were embedded in NYSEG's Brewster command center to assist in the restoration effort and provide guidance to NYSEG staff.²⁹² NYSEG indicated that NYPA personnel helped customers better understand how the restoration process was taking place.²⁹³ NYPA personnel reworked NYSEG's public communication strategy and offered suggestions on how to better reach its customers, especially in Brewster. For example, instead of issuing company-wide press releases, NYPA advised NYSEG to issue area-specific press releases that were more focused for customers. As a result, NYSEG's public communications became more focused and provided more localized information.²⁹⁴

Some local governments complained about the quality of information given by NYSEG. The Commission found that there needs to be a more effective way for NYSEG to convey work plans to the local municipalities. For example, one town in NYSEG's Brewster division was told that there would be 20 crews working in their area, but the town was unclear about what that meant in terms of restoration.²⁹⁵ Accordingly, NYSEG should be able to provide better information about how the company conducts its restoration activities.²⁹⁶

Recommendations:

- **Expand training programs to increase the number of NYSEG trained municipal liaisons. Provide liaisons with access to outage and restoration work plan information. Ensure that local liaisons foster "blue sky" relationships with the municipal officials in geographic areas that the liaisons will be assigned.**
- **Improve communication of work plans to local governments.**

²⁸⁷ Jan. 24, 2013 Interview of Brian Warner (Director of Policy, Analysis, and External Communications, NYPA) [hereinafter Warner Interview]; January 23, 2014 Interview of Connie Cullen (Director of Media Relations, NYPA) [hereinafter Cullen Interview].

²⁸⁸ Warner Interview.

²⁸⁹ Salmon Interview.

²⁹⁰ Dover Interview.

²⁹¹ *Id.*

²⁹² Cullen Interview.

²⁹³ *Id.*

²⁹⁴ *Id.*

²⁹⁵ North Salem Interview.

²⁹⁶ *Id.*

7.7.3 RESOURCE SHORTAGES

Lack of Formalized Allocation Procedure

The Commission's investigation found that the lack of an adequate resource allocation procedure limited NYSEG/RG&E's decision making process. Throughout the course of its investigation, the Commission has been unable to identify formalized procedure for allocating resources between NYSEG and RG&E. Given the resource allocation problems experienced by O&R and Con Edison during Sandy, NYSEG/RG&E should reform their resource allocation process to make it more formalized and aligned with industry standards.

Additionally, NYSEG/RG&E began the process of obtaining outside assistance four days before Hurricane Sandy was predicted to make landfall. Based on the weather forecast, NYSEG/RG&E planned for and ultimately did secure 60 contractor crews before the storm to supplement the Brewster, Liberty, and Rochester divisions. During interviews with NYSEG personnel, the Commission found that these crews had been allocated equally amongst the three divisions based on the weather forecast. However, given the damage suffered in the Brewster operating division during Hurricane Irene, NYSEG should have allocated more crews for the Brewster division. Had a formalized resource allocation procedure been in place during Sandy, the resource problems experienced in Brewster could have been mitigated.

Utility Storm Response Facilities

The Commission found that NYSEG's Brewster command center lacked the means to be an effective storm response center. Storm response facilities are essential for a large scale storm restoration effort and they need to be adequately sized to allow for the constant influx of personnel during a storm event. In addition, storm response facilities should be equipped with appropriate communications capabilities, such as a sufficient supply of telephone lines and adequate access to wireless internet.

During Hurricane Sandy, NYSEG's Brewster Incident Commander's initial headquarters was nothing more than a small conference table and a telephone.²⁹⁷ The Commission also found that NYSEG's Brewster storm center struggled with internet connectivity and communication bandwidth.²⁹⁸ NYSEG and NYPA reached out to Verizon and were ultimately able to upgrade some of their equipment during the storm restoration period.²⁹⁹ However, these upgrades were not sufficient because broadband demands kept increasing.³⁰⁰ In addition, the number of personnel entering and leaving the Brewster command center created a cramped and hectic situation.³⁰¹ NYSEG eventually shifted some activities (e.g., logistics and staging) to other locations to ease the congestion.³⁰² The Commission, however, stresses that this was something that NYSEG should have planned for *prior* to Hurricane Sandy.

The deficiencies in NYSEG's Brewster command center are especially problematic given NYSEG's problems during Hurricane Irene. NYSEG was aware of the Brewster service center problems after Hurricane Irene,

²⁹⁷ Tartaglia Interview.

²⁹⁸ Matyjas Interview.

²⁹⁹ *Id.*; Tartaglia Interview.

³⁰⁰ Matyjas Interview.

³⁰¹ Tartaglia Interview.

³⁰² Mar. 22, 2013 Interview of David Foss (Manager of Programs, Projects, and Safety, Ibedrola, USA) [hereinafter Foss Interview].

which occurred again during Hurricane Sandy.³⁰³ Despite prior storm center problems, NYSEG made little progress before Hurricane Sandy in improving their Brewster storm center.³⁰⁴

Failure to Pre-Stage Necessary Equipment

The Commission investigation found that NYSEG did not run out of materials needed to complete restoration despite the fact that approximately 800 poles and 350 transformers were damaged or destroyed in the Brewster division alone.³⁰⁵ NYSEG, however, failed to obtain or pre-position a sufficient number of specialized equipment needed to set poles in rocky terrain in its Brewster territory.³⁰⁶ NYSEG stated that this did not delay restoration in any substantial way because it was able to have three ledge drillers on site on November 1, 2012 and a fourth by November 2.³⁰⁷ NYSEG confirmed that this was a lesson learned and that ledge drillers will be staged in Brewster for future storms.³⁰⁸

Hoteling and Travel for Crews

During Hurricane Sandy, NYSEG experienced problems securing sufficient housing for foreign crews. NYSEG was forced to house foreign crews in hotels outside the impacted storm area, which resulted in longer commute times and shorter workdays for foreign crews.³⁰⁹ Some crews were lodged as far as 1.5 hours away.³¹⁰

RG&E Staffing Shortages

During Hurricane Sandy RG&E only had 24 in-house damage assessors for their entire service territory.³¹¹ This number of damage assessors was inadequate for a storm the size of Hurricane Sandy and was inadequate to cover RG&E's entire service territory.

Recommendations:

- **Develop a formalized procedure for the appropriate allocation of resources between Iberdrola USA subsidiaries, especially if staff from other subsidiaries will be providing storm response support in New York.**
- **Improve the functionality of storm centers such as the Brewster service center. All storm centers should have access to sufficient communication devices such as broadband and email. In addition, storm centers should be large enough to handle personnel entering and leaving the facility. NYSEG should explore options for housing its storm centers in large spaces to avoid congestion of personnel.**

³⁰³ *Id.*

³⁰⁴ *Id.*

³⁰⁵ Lynch Transcript at 189-90 (“[W]e never ran out of materials, never once throughout this whole storm.”). In fact, according to their Part 105 filing, NYSEG sent transformers to Con Edison, gas regulators to LIPA, and dry ice and bottled water to Con Edison. NYSEG Sandy Part 105 Report at iii.

³⁰⁶ Matyjas Interview; O’Brien Interview.

³⁰⁷ Nov. 4, 2012 Email re: FW: Trying to locate Ledge Diggers sent to Brewster (NYSEG-RGE_00063783).

³⁰⁸ O’Brien Interview.

³⁰⁹ Tartaglia Interview; Jan. 21, 2013 Interview of Ed Schrom (DPS) [hereinafter Schrom Interview]

³¹⁰ Schrom Interview; Salem Interview.

³¹¹ Mar. 24, 2013 Interview of Richard Frank (RG&E Manager of Regional Electrical Operations) [hereinafter Frank Interview].

- **Develop written procedures for establishing base camps to ensure adequate housing for foreign crews in the vicinity of their work sites.**
- **RG&E should identify and train additional personnel to remedy the inadequate level of damage assessors available for large storm events.**

7.7.4 CRITICAL INFRASTRUCTURE

The Commission found that NYSEG/RG&E did not maintain a unified list of critical infrastructure facilities during Hurricane Sandy.³¹² It is imperative that utilities such as NYSEG/RG&E maintain a list of critical infrastructure facilities within their service territory and share these lists with local municipalities. Critical infrastructure lists allow utilities to more easily determine and prioritize facilities that are most critical to customers and local governments. Almost all of the utilities investigated maintain such lists and it is unacceptable that NYSEG/RG&E did not.

In addition, NYSEG's prioritization methodology in its Brewster division was altered during Hurricane Sandy after discussions with State government officials.³¹³ Here, NYSEG transitioned from its emergency plan's "1, 2, 3" prioritization scheme to a new "A, B, C" scheme.³¹⁴ Because this new scheme differed from previous methods, it created the potential for confusion among local government officials during Hurricane Sandy.

Recommendation:

- **Coordinate with local governments in identifying critical infrastructure facilities. This will allow NYSEG/RG&E to incorporate critical infrastructure information into their emergency procedures and will allow them to regularly share these critical infrastructure lists and restoration priorities with local governments.**

7.8 CENTRAL HUDSON

Central Hudson Gas and Electric serves the Hudson Valley area of New York State, including portions of Orange, Greene, Ulster, Putnam, Dutchess, Sullivan, Albany, and Columbia Counties. During Hurricane Sandy, over 100,000 customers in Central Hudson's service territory lost electricity, representing approximately 30 percent of Central Hudson's customer base. While Hurricane Sandy did not impact Central Hudson's service territory as significantly as other utilities, Central Hudson did experience problems with its storm performance. Specifically, Central Hudson failed to adequately anticipate and prepare for the flood surge threat along the Hudson River. In addition, Central Hudson did not assign enough municipal liaisons to coordinate with local government officials, which caused undue strain on local governments during the storm. Further, Central Hudson's post-storm review process is inconsistent and not formalized. Given the problems identified, Central Hudson has numerous areas for improvement.

7.8.1 CENTRAL HUDSON DID NOT ADEQUATELY PREPARE FOR THE FLOOD SURGE DESPITE WARNINGS

Central Hudson's service territory experienced flooding during Hurricanes Irene and Sandy. The flooding during Hurricane Irene resulted in significant stream and creek flooding, whereas the flooding during Hurricane Sandy was predominantly a storm surge along the Hudson River.³¹⁵ Given the recentness of

³¹² Mar. 14, 2013 Interview of Terri Van Brooker (NYSEG/RG&E Director of Customer Service).

³¹³ Matyjas Interview.

³¹⁴ *Id.*

³¹⁵ DPS Irene/Lee Report, at 8.

Hurricane Sandy, the Commission focused on the storm surge threat along the Hudson River during Hurricane Sandy. Here, Central Hudson was repeatedly warned of a tidal surge that would impact the waterfront areas along the Hudson River. Weather reports at the same time predicted a storm surge of up to five feet.³¹⁶ The weather reports also predicted “record” tidal flooding in Poughkeepsie and a Hudson River flood surge that was worse than that experienced during Hurricane Irene.³¹⁷ Ultimately, however, the Hudson River did not experience the degree of flooding that was forecasted and the flooding did not impact a large number of customers.

Despite these severe weather warnings, Central Hudson failed to adequately prepare and respond to the impending flood surge threat. Central Hudson officials indicated during interviews with the Commission that while they were aware of these weather reports, they did not consider the flood surge to be a serious threat.³¹⁸ One Central Hudson executive went so far as stating that Central Hudson did not “perceive a damage threat” from flooding prior to Hurricane Sandy.³¹⁹ Other Central Hudson executives stated that flooding was not a significant issue prior to Hurricane Sandy due to the low number of customers expected to be effected.³²⁰ However, Central Hudson’s top executives did not have internal estimates of the impact that this storm surge could actually have. For example, Central Hudson’s Incident Commander stated that he was never apprised of or given *any* prediction of the number of customers that might be affected by flooding in Central Hudson’s territory.³²¹ In addition, Central Hudson does not keep internal records of areas along major bodies of water that are at a risk of or historically experience flooding.³²² When probed about this issue, one high level Central Hudson official stated that he did not know about flood risk areas because every storm is “different.”³²³

The Commission found that Central Hudson’s indifference about the severity of the flood threat directly impacted its pre-storm flood preparations. Central Hudson did not internally discuss the possibility of de-energization or preemptive de-energization of flooded areas at any point prior to Hurricane Sandy.³²⁴ Moreover, Central Hudson never discussed procedures for re-energization and safety inspections if a de-

³¹⁶ Oct. 28, 2012 Orange County Weather Alert (CH_00012847); Oct. 27, 2012 Orange County Weather Alert (CH_00012929); Oct. 26, 2012 Orange County Weather Alert (CH_00012913); Oct. 28, 2012 National Weather Service Power Point Briefing (CH_00015676).

³¹⁷ Oct. 29, 2012, 3pm Central Hudson Storm Update (CH_00013140); Oct. 27, 2012 Orange County Weather Alert (CH_00012929).

³¹⁸ May 6, 2013 Interview of Steve Burger (Manager of New Business Development & New York State Governmental Affairs, Central Hudson and Liaison Officer during Hurricane Sandy) [hereinafter Burger Interview] (stating that everyone in a managerial position would have received these weather reports); May 17, 2013 Charles Freni (Senior Vice President of Operations, Central Hudson) [hereinafter Freni Transcript] Hearing Transcript, at 69, 71 (acknowledging that he was aware of the flood threat but stating that he did not consider the threat to be serious); May 6, 2013 Interview of Timothy Hayes (Manager of Transmission & Distribution Operations and Emergency Response, Central Hudson) [hereinafter Hayes Interview] (stating that he received the National Weather Service reports and other weather reports from the Orange County EOC but acknowledging that he did not perceive a serious flood threat).

³¹⁹ Hayes Interview.

³²⁰ Burger Interview (stating that flooding was not a big magnitude issue because of the low number of customers expected to be affected); Freni Transcript at 71 (“I have 300,000 customers and, you know, my concern is for all of them and I know from a flooding perspective that affects a very, very small number, and so there’s not a lot of preparation that’s necessary for the small number of customers that flooding affects.”).

³²¹ Freni Transcript at 83.

³²² Burger Interview.

³²³ *Id.*

³²⁴ Freni Transcript at 73 (acknowledging that Central Hudson never internally discussed what might happen if an area was flooded and Central Hudson had to de-energize the flooded area).

energized area had to be reconnected to the power grid.³²⁵ This lack of planning foresight was exacerbated by the fact that Central Hudson did not have a formalized, written flood procedure prior to or during Hurricane Sandy.³²⁶ Because Central Hudson had no formal, written guideline for dealing with flooding and de-energization, Central Hudson was forced to deal with flooding and de-energization using an *ad hoc* and informal approach.³²⁷ Following Hurricane Sandy, the PSC recommended that all utilities, including Central Hudson, incorporate formalized flood procedures into their emergency plans.³²⁸ As per the PSC's recommendations, Central Hudson has added formal flood procedures to its 2013 Electric Emergency Plan (EEP).

Recommendations:

- **Improve pre-storm preparations and planning for flooding.**
- **Hold pre-storm discussions with local government officials about developing and implementing flood procedures where there is a predicted risk of flooding.**
- **Coordinate training of de-energization and re-energization procedures between Central Hudson and local governments during blue-sky conditions.**

7.8.2 INADEQUATE LIAISON STAFFING

During Hurricane Sandy, Central Hudson did not have an adequate number of municipal liaisons for their entire service territory. Municipal liaisons are important for facilitating communication and coordination between local governments and the utility. At the height of the storm event, there must be enough municipal liaisons to handle the needs of local governments. During Hurricane Sandy, Central Hudson did not have enough municipal liaisons to serve this need. Out of the five operating districts within Central Hudson's service territory, there were only four municipal liaisons assigned.³²⁹ Moreover, there were only one or two additional personnel serving under those municipal liaisons.³³⁰ Central Hudson staffed the same number of municipal liaisons during Hurricane Sandy as it normally does during blue-sky days.³³¹ In other words, despite the severe storm conditions, Central Hudson did not increase the number of municipal liaisons from what it used during normal non-storm days. The inadequate staffing of municipal liaisons makes it more difficult for local municipalities to effectively coordinate with Central Hudson. The Commission recommends that Central Hudson increase the number of municipal liaisons to a level greater than that used during normal blue-sky days. This will help increase coordination between Central Hudson, local municipalities, and county governments.

Central Hudson encourages local governments to go through the counties to escalate issues such as down wires and road clearing. Central Hudson's established practice is to instruct local municipalities to escalate

³²⁵ *Id.* ("Q: Prior to Sandy, internal to Central Hudson, was there ever discussed what might happen if an area was flooded and you had to reenergize it and do safety inspections? Was that every discussed internally with Central Hudson? A: No").

³²⁶ Central Hudson Electric Emergency Plan (2012) [hereinafter CH 2012 EEP]; Freni Transcript at 74-75.

³²⁷ Burger Interview (stating that there was no formal guideline for flood restoration during Sandy).

³²⁸ Feb. 14, 2013 PSC Letter to Central Hudson re: Flooding in its 2013 EEP.

³²⁹ Burger Interview; Freni Transcript at 17; May 7, 2013 Interview of Heidi Johnson (Director of Electric Outage Systems, Central Hudson) [hereinafter Johnson Interview]; Oct. 29, 2012 Central Hudson Community Briefing (CH_00012417).

³³⁰ *Id.*

³³¹ Freni Transcript at 20.

issues through 911 and the county EOC instead of directly contacting Central Hudson.³³² As per that procedure, Central Hudson assigns a representative to be stationed at county EOCs during storm events. While Central Hudson assigns representatives to the county-level EOCs, they do not assign representatives to any of the local municipal EOCs.

The problems inherent in Central Hudson's policy of funneling local governments through the county EOCs is evidenced by the difficulties experienced by a large municipality in Central Hudson's service territory. As the Hudson River storm surge was hitting the City of Newburgh's waterfront during Sandy, City officials reached out to Central Hudson to escalate the problem. City officials first contacted the Central Hudson customer service hotline but never received a response from Central Hudson. City officials then reached out to the Central Hudson representative stationed at the county EOC, and again, never received a call back from that representative.³³³ The experiences of this particular city during Hurricane Sandy demonstrate that better coordination is needed between Central Hudson and local governments.

The Commission recognizes that assigning a representative to each municipality in Central Hudson's service territory might be onerous. However, Central Hudson should nonetheless explore the possibility of sending representatives to some of the larger local municipal EOCs if a weather event is localized sufficiently. This will decrease the dependence of local municipalities on the county EOCs and will increase the level of coordination between Central Hudson and local governments.

Recommendations:

- **Identify and cross-train workforce to remedy the inadequate number of municipal liaisons dedicated to serving local municipalities.**
- **Explore assigning liaison representatives to local municipal EOCs in a localized weather event and not just county EOCs. Central Hudson needs a better presence at local government EOCs.**

7.8.3 POST-STORM PERFORMANCE REVIEWS – CENTRAL HUDSON DOES NOT HAVE A CONSISTENT AND FORMALIZED PROCEDURE FOR POST-STORM REVIEWS

Aside from the legally mandated post-storm critique in its Part 105 Report,³³⁴ Central Hudson does not have a uniform and formalized procedure for conducting internal post-storm performance reviews. Post-storm reviews facilitate self-improvement, allowing utilities to identify problem areas and areas of success. Following Hurricane Sandy, Central Hudson did not conduct a formalized and uniform post-storm performance review. High level Central Hudson officials interviewed by the Commission stated that the Sandy after-action reviews were informal, consisting of informal meetings, *ad hoc* discussions, and at times

³³² Hayes Interview; Johnson Interview; July 30, 2012 Central Hudson Letter to the PSC (CH_00006541) (“When a municipality has the need for a Central Hudson line or line clearance crew to assist with the removal of public hazards and/or blocked roads, this request is done by contacting the 911 Representative working in the appropriate county EOC. It is one of the responsibilities of these Reps to communicate the needs of state and local emergency responders and high way departments to our Operations section.”).

³³³ April 22, 2013 Interview of the City of Newburgh Officials [hereinafter Newburgh Interview].

³³⁴ After storm events with restoration periods exceeding three days, all utilities are required to file § 105 filings with the PSC. 16 NYCRR § 105 (“Part 105 Reports”). These Part 105 Reports provide a review of all aspects of the utilities’ preparation and system restoration performance. In addition, utilities will often provide lessons learned from the storm event.

some emails.³³⁵ The Commission recommends that Central Hudson implement a more uniform, consistent, and formalized procedure for conducting post-storm performance reviews.

Recommendations:

- **Formalize and implement a uniform procedure for conducting post-storm performance reviews.**
- **Central Hudson should ensure that all performance reviews are appropriately documented for training purposes.**

7.9 GRID NEW YORK

Grid New York's service territory was impacted most severely by Hurricane Irene and the immediate additional impact of Tropical Storm Lee. At the peak of Hurricane Irene's impact, more than 156,000 Grid New York customers were out of service; representing approximately 10 percent of Grid New York's customer base; an additional 23,000 customers lost power following flooding caused by Tropical Storm Lee. Customers affected by Irene were restored in about six days, but additional customers lost power during Tropical Storm Lee, and were not restored until five days after that storm hit.

The Commission's investigation of Grid New York's response to these two storms revealed several deficiencies, as well as some best practices, in the Company's emergency planning and response procedures. First, the Company's emergency planning function was not performing its proper oversight function. Second, the Commission learned that Grid New York is a reluctant participant in the mutual assistance process, highlighting the need to reform the current mutual assistance regime. Third, while the Commission was impressed that Grid New York prioritized and committed itself to providing its local stakeholders with information and assistance, Grid New York can do even more to improve "blue sky" coordination with the communities it serves, and put a greater emphasis on ensuring that its representatives are known to and familiar with those communities. Fourth, Grid New York's information systems are simply inadequate as a storm restoration tool, and must be updated and more fully integrated into the restoration process. Finally, as was the case with Con Edison and Central Hudson, Grid New York failed to adequately prepare its infrastructure and its storm response plans for the foreseeable outcome of severe flooding.

7.9.1 GRID NEW YORK'S EMERGENCY PLANNING DEPARTMENT NEEDS IMPROVEMENT

Grid New York's Emergency Planning program in its upstate New York territory is understaffed and lacks sufficient oversight or authority to perform its function.³³⁶ For example, Grid New York's EEP generally outlines the roles and responsibilities of employees during a storm event. In order to provide the necessary operational detail, each operating division develops its own "inserts," which contain additional information relevant to its storm function.³³⁷ The divisions are required to update their "inserts" twice a year; these updates, however, are not formally submitted or reviewed by Emergency Planning.³³⁸ Similarly, Emergency

³³⁵ Johnson Interview. It is worth noting that in the Commission's interview of Charles Freni, Mr. Freni stated that Central Hudson issued survey forms to mutual assistance responders and conducted critiques of Central Hudson's IT functions. Freni Transcript at 37-38. However, aside from Mr. Freni's statements, the Commission has not found any other evidence of these surveys. When asked whether Mr. Freni was aware of any other storm critiques conducted after Sandy, he stated that he was not. Freni Transcript at 39.

³³⁶ The Grid New York program currently has two employees. May 17, 2013 Interview of Glen Aichinger (Manager of Electric Emergency Planning, National Grid Upstate New York) [hereinafter Aichinger Interview].

³³⁷ *Id.*

³³⁸ *Id.*

planning requires each division to perform two annual drills. The drills, however, are designed by each division and are not reviewed or approved by Emergency Planning in advance of the drill, nor does Emergency Planning attend or monitor every regional drill.³³⁹ Grid New York's Emergency Planning program should be expanded and given a more robust auditing and oversight role in order to facilitate a uniform and effective approach to storm preparation across the entire Grid New York service area.

Recommendations:

- **Take steps to bolster the authority and oversight of its emergency planning function, including through the possible addition of other staff members to the Grid New York emergency planning team.**
- **Conduct additional audits, trainings, or drills to ensure that its employees fully comprehend their role during a storm emergency.**

7.9.2 GRID NEW YORK DID NOT ADEQUATELY PLAN FOR FLOODING DURING HURRICANE IRENE AND TROPICAL STORM LEE

Inadequate Flood Mitigation Procedures

During Hurricane Irene and Tropical Storm Lee, numerous Grid New York installations in upstate New York were damaged by floodwaters. Grid New York's Amsterdam distribution substation shut down, and had to be replaced by a temporary substation located outside the flood plain, and Grid New York was minutes away from de-energizing its substation in Schenectady to avoid a similar outcome.³⁴⁰ Although the damage caused by the two storms was unprecedented, it was not the first time Grid New York's upstate New York service area had been hit by catastrophic flooding. Indeed, as a result of severe flooding in the Mohawk River basin during June 26-29, 2006, five New York counties in Grid New York's service area were declared Federal disaster areas. And four of Grid New York's substations were de-energized—two as a result of flooding damage, and two at the request of local government officials. Despite this first-hand experience with the effects of flooding to its infrastructure, Grid New York chose not to undertake a comprehensive risk analysis of its potentially flood-prone installations, instead doing piecemeal evaluations of its transmission substations and of those substations that had been affected by flooding in the past.³⁴¹ A more thorough review was not undertaken until after Hurricane Irene and Tropical Storm Lee; it is due to be completed in Summer 2013.³⁴²

³³⁹ *Id.*

³⁴⁰ July 8, 2012 Email re: Amsterdam NY Outage (NG-E-00334183); September 5, 2012 Email re: Update (NG-E-00300133) ("Recall that we were literally within a few minutes and one inch of the water level rising from de-energizing this sub feeding downtown Schenectady.")

³⁴¹ November 30, 2012 Email re: Substation Flooding (NG-E-00550996) (noting that no review was ever done of the Company's distribution substations.) The Company hired a consultant to conduct a review of transmission substations in 2009. *Id.*; November 30, 2012 Email re: Station Flooding (NG-00550998); November 30, 2012 Email re: Station Flooding (NG-E-00554495). The 2009 study identified the Amsterdam substation as a station "at risk" of flood damage; however, it does not appear that any flood mitigation work was done on the substation prior to Hurricane Irene's flooding. Nov. 28, 2012 Email re: Station Flooding (NG-E-00550998) (listing flood mitigation work at two of the 10 stations identified as "at risk" by the 2009 study).

³⁴² Niagara Mohawk Power Corporation d/b/a National Grid Hurricane Irene August 28, 2011 Storm Report, at 51 (Nov. 14, 2011) [hereinafter Grid Irene Storm Report]; Nov. 30 Email re: Station Flooding (NG-E-00550998) (noting that, as of November 30, 2012, no study was underway and the Company was likely not in

In addition, Grid New York's emergency planning did not prepare for possible flooding scenarios on major waterways. Specifically, the EEP in effect during Hurricane Irene did not include any guidelines for when and how to properly de-energize a substation in the event of impending flooding—indeed, Grid New York's Front Street substation in Schenectady was minutes away from needing to be de-energized, but there were no provisions in the EEP addressing that contingency.³⁴³ Nor did the EEP include a list of what steps to take to mitigate flooding impact (such as sandbagging or moving critical equipment to higher ground).³⁴⁴ Furthermore, it is unclear whether Grid New York included flooding scenarios in its annual emergency drills prior to Hurricane Irene.³⁴⁵ In sum, despite having experienced severe flooding in its upstate New York service area a mere five years prior to Hurricane Irene, Grid New York appears to have underestimated the threat of flooding to its upstate operations, resulting in its failure to adequately prepare for the flooding that in fact occurred during Irene.

Emergency Planned Lacked Procedures for Expediting Safety Inspections of Customer Equipment

Grid New York was not prepared for restoration of the challenges caused by flooding damage to customer equipment. The one-two punch of Hurricane Irene and Tropical Storm Lee brought devastating flooding damage to Grid New York's service territory in the upstate communities of Amsterdam, Fonda, Middleburg, Rotterdam Junction, Schoharie, and Schenectady. Initially, flooding in those areas was so severe as to restrict access for either repair or damage assessment.³⁴⁶ Once these areas were accessible, it became clear that a significant number of customers could not be re-energized due to damaged customer equipment. Grid New York dealt with the issue swiftly and effectively, dispatching dedicated line crews and community representatives to go door-to-door and provide affected customers with information and assistance.³⁴⁷ The procedure Grid New York ultimately came up with, however, was improvised in real time by Grid New York field personnel—the EEP in effect during Irene did not include any emergency procedures related to flooding to customer equipment.³⁴⁸ Grid New York has since realized the importance of codifying these procedures, and they are included in the most recent version of the EEP, filed in February of this year.

Recommendations:

- **Expedite the completion of its substation risk mitigation study.**
- **Incorporate the conclusions of its storm hardening study into its future designs and capital plans.**

compliance with the DPS recommendation); November 30, 2012 Email re: Station Flooding (NG-E-00554490) (indicating the complete substation risk study will be completed in July 2013).

³⁴³ Aichinger Interview (acknowledging that the EEP in effect during Irene did not include a procedure for preemptive shutdown of substations); Grid Irene Storm Report, at 13; Sept. 5, 2011 Email re: Update (NG-E-00300133) (“got a call from Schenectady County -- they are becoming concerned about flooding near our Front Street Sub again - not so much at the moment but as the rain continues into Tuesday and Wednesday [sic] they think the situation may be what it was like last week. Recall that we were literally within a few minutes and one inch of the water level rising from de-energizing this sub feeding downtown Schenectady[.]”).

³⁴⁴ Aichinger Interview; National Grid EEP, at NG-E-00489045-318.

³⁴⁵ Aichinger Interview.

³⁴⁶ Grid Irene Storm Report, at 35-36.

³⁴⁷ Daly Transcript at 59-71.

³⁴⁸ National Grid EEP.

- **Take immediate steps to harden its infrastructure against the effects of severe flooding, including the potential relocation of substations away from forecasted flood zones.**
- **Regularly drill for emergency scenarios involving severe flooding to its infrastructure and its customer service areas.**
- **Incorporate into its emergency planning a coherent, uniform policy for streamlining the re-energization of flooded customer equipment.**

7.9.3 GRID NEW YORK INTERACTED EFFECTIVELY WITH MUNICIPALITIES

Ongoing Communication with Stakeholders

Since its corporate reorganization in 2011, Grid New York has placed a particular emphasis on improving its ability to meet the needs of its local stakeholders, including local elected officials, representatives from the PSC, and managers of emergency management and public works officials.³⁴⁹ This renewed commitment was undertaken in response to state regulator concerns that Grid New York was not sufficiently responsive or accountable to the local communities which it serves.³⁵⁰

During both Hurricanes Irene and Sandy, this commitment manifested itself through, for example, twice-daily conference calls with local officials, the deployment of mobile emergency operations centers in hard-hit areas, and the assignment of both a dedicated community contact and a liaison at the county emergency operations center.³⁵¹ Numerous local stakeholders recognized these efforts during the Commission’s public hearings and interviews.³⁵² For example, emergency management officials from Saratoga County noted a marked improvement in the quality of Grid New York’s community outreach since the transition from the Niagara Mohawk Corporation to National Grid management.³⁵³ They also noted, as did officials from Schoharie and Montgomery Counties, that local Grid New York contacts were always readily available during an emergency to provide in-depth operational information or assistance with particular emergency situations.³⁵⁴ And stakeholders were especially complimentary of Grid New York’s continued community engagement after the event in the form of community development initiatives aimed at helping affected communities recover from the economic damage caused by the storms.³⁵⁵ Grid New York’s communication efforts have also been recognized by the PSC, which referenced Grid New York’s storm reports as exemplars for the type and quality of information that the PSC expects to see from all electric utilities.³⁵⁶

³⁴⁹ Daly Transcript at 19-20.

³⁵⁰ Akley Interview.

³⁵¹ Daly Transcript at 15-16; Schoharie Interview.

³⁵² Schenectady Interview; April 25, 2013 Interview with Saratoga County Director of the Office of Emergency Services [hereinafter Saratoga Interview]; May 5, 2013 Interview with Montgomery County Emergency Management Directors [hereinafter Montgomery Interview]; May 10, 2013 Interview with the Director of Operations for the City of Troy [hereinafter Troy Interview]; Transcript of March 6, 2013 Moreland Commission Public Hearing at 18-19 (Testimony of Columbia County Director of Emergency Management).

³⁵³ Saratoga Interview.

³⁵⁴ *Id.*; Schoharie Interview; Montgomery Interview.

³⁵⁵ Schoharie Interview.

³⁵⁶ June 28, 2012 Email re: Highlights from Today’s PSC Special Session on Utility Storm Response, Electric Reliability and Inspections (NG-E- 00293059).

Liaisons Should Remain Engaged in the Communities They Serve During Non-Emergency Periods

Grid New York received high marks for its communications with local officials in its upstate New York service territory, including town supervisors and heads of public works departments and emergency management departments. These stakeholders indicated that, for the most part, Grid New York's liaison program has been both proactive and effective for many years.³⁵⁷ Several individuals echoed the close working relationship that Grid New York has fostered during Hurricane Irene, Tropical Storm Lee and other major storm events.³⁵⁸ However, municipalities expressed an interest in greater storm coordination activities with liaisons during blue-sky periods. For example, local officials noted that they would like more frequent coordination between their municipality and Grid New York in identifying critical infrastructure locations in the area.³⁵⁹ Other stakeholders suggested expanding coordination efforts to include towns and villages, in addition to counties, which are already regularly included in Grid New York emergency planning events.

A separate but related issue is the need to ensure that the community liaisons Grid New York assigns to each municipality are familiar with the unique characteristics of the area they serve. Stakeholders interviewed noted the importance of knowing their local Grid New York contact, and of having that contact know and understand their unique local needs.³⁶⁰ Grid New York currently makes an effort to assign liaisons who are from or work in or near the communities to which they are assigned.³⁶¹ However, during events the size of Hurricanes Irene or Sandy, local resources are stretched thin and outside resources may need to be assigned to act as liaisons. During Hurricane Irene, for example, the Company staffed its mobile emergency operations center with employees from National Grid's New England territory.³⁶² While it is understandable that, in a large-scale event, Grid New York will not be able to locally-staff every community liaison position, it is important to balance the need to staff each liaison position with the need to, in the words of National Grid's former COO, "ensure the liaisons are knowledgeable in their assigned town's infrastructure, town priorities and our response[.]"³⁶³ This could potentially be accomplished by assigning liaisons to a regular, "Standing" community assignment in advance of an event during blue sky periods—as one Grid New York employee suggested, "[h]aving pre-assigned and stable town assignments allows the employee to secure knowledge about the town(s) in advance of the event, and also to build upon on-the-ground knowledge and relationships with town officials."³⁶⁴

³⁵⁷ April 24, 2013 Interview with the Director of Schenectady County Department of Emergency Management [hereinafter Schenectady Interview]; March 6, 2013 Moreland Commission Public Hearing Transcript, at 18-19 (Testimony of Columbia County Director of Emergency Management).

³⁵⁸ April 23, 2013 Interview with Schoharie County DPW Commissioner and Town Supervisor, Town of Schoharie [hereinafter Schoharie Interview]; Troy Interview, *supra* n. 351.

³⁵⁹ Schoharie Interview.

³⁶⁰ *Id.* The Schoharie officials noted that the local National Grid representative is due to retire in the near future, and they expressed some concern that he will be replaced by someone who does not know or understand the area.

³⁶¹ Aichinger Interview.

³⁶² Daly Transcript at 12-13; Aichinger Interview (noting that staffing communities with local liaisons becomes harder as the storm footprint/impact grows).

³⁶³ July 2, 2012 Email re: Some open items/ next steps E2E Emergency Response (NG-E-00293696).

³⁶⁴ Observation Tracker at NG-E-00533123, NG-E-00533125 ("I would recommend that Community Liaisons be assigned to the same towns for each storm and be instructed to visit these towns during "blue skies" to build upon the relationships.").

Recommendations:

- **Where possible, Grid New York should continue to assign representatives with local knowledge of an area to act as community liaisons for that area.**
- **Community liaisons should remain engaged throughout the year in the communities they serve, building relationships with local stakeholders and developing a first-hand understanding of the local conditions.**

7.9.4 GRID NEW YORK'S INFORMATION SYSTEMS FAIL TO PERFORM AS NEEDED DURING EMERGENCY EVENTS

Grid New York has an obligation to effectively communicate not only with its local community leaders, but also with its customers—on this front, Grid New York experienced several challenges throughout its service territory stemming from the shortcomings of its information systems. Grid New York's systems, including the outage management system and the online customer outage map, did not function properly during Hurricane Irene, undermining the quality and availability of Grid New York's external communications and slowing down the flow of information from the field to the storm response centers. First, as noted by Grid New York in its Hurricane Irene Storm Report, submitted to the PSC, Grid New York experienced a separate technological challenge that hampered its communication efforts with its customers: its Outage Central website, which provides outage information and estimated times of restoration to its customers, experienced several issues, including slow or limited availability and inaccurate or untimely outage and recovery information.³⁶⁵ This failure obviously compromised the quality and availability of outage information to customers.

Second, during Hurricane Irene, Grid New York's PowerOn outage management system, was unable to accommodate the large number of users, and consequently "crashed" or was "sluggish" to the point of being unusable at times.³⁶⁶ Grid New York acknowledges these problems and it has installed additional infrastructure to address identified issues, including additional memory, CPU and front-end web servers.³⁶⁷ Additionally, Grid New York is still heavily relying on paper processes for capturing outage- and job-related information, which is inefficient and causes a necessary time lag in capturing information from the field.³⁶⁸ The Commission found that Grid New York is in the process of upgrading its outage management system and recommends Grid New York complete these actions as expeditiously as possible in order to support upcoming storm preparedness and response.

Recommendations:

- **Grid New York should expedite the adoption and integration of newer, more functional information systems into its storm response procedure.**
- **Grid New York should computerize more of its storm restoration activities, such as the collection and real-time transmission of damage assessment information.**

³⁶⁵ Grid Irene Storm Report at 21.

³⁶⁶ Wires Down Process (NG-E-00193725-726) (documenting recommended "Improvement Points" to the wires down data entry process on PowerOn).

³⁶⁷ Akley Interview (noting efforts to increase PowerOn's server capacity); Observation Tracker (containing observations from "STORM ROOM SUPPORT" submitted on Nov. 15, 2012).

³⁶⁸ Observation Tracker, NG-E-00533131.

7.9.5 GRID NEW YORK'S BENCHMARKING EFFORTS SHOULD BE EXPANDED TO FURTHER EVALUATE SYSTEM IMPROVEMENTS

Grid New York participates in benchmarking activities organized by the Edison Electric Institute to examine mutual assistance, logistics, and resource issues industry-wide.³⁶⁹ Grid New York also routinely shares such information among its service territories in New York, Massachusetts, and Rhode Island.³⁷⁰ Further information gleaned from the Commission's investigation details that Grid New York is evaluating methods to integrate the use of technology to improve its business practices.³⁷¹ Most notably, Grid New York is focused on 3G distribution automation to make its overhead electric system more reliable through the "Smart Grid" program and the use of its preexisting "End-To-End" emergency response process teams to focus on storm data collection.³⁷² Grid New York recognizes the need to enhance system efficiency and speed restoration by employing the use of technology.³⁷³ However, the need to evaluate its system is underscored by Grid New York's reluctance to conduct a robust storm hardening study, which would incorporate both internal corporate and industry-wide benchmarking activities.³⁷⁴ Another concern is illustrated by Grid New York prioritizing the collection of storm data for use in certain benchmarking activities, but the accuracy of Grid New York's data is called into question due to the company's continued use of its old outage management system, which will soon be phased out.³⁷⁵

Grid New York could better focus its efforts to expand its benchmarking activities. Con Edison, for example, exhibits best practices for benchmarking activities by intensely focusing on ways to improve both its overhead and underground system reliability.³⁷⁶ Con Edison parleys information received through involvement in varied task forces, committees, and through consultants to develop and implement new overhead loop designs in heavily treed areas of its service territory, add overhead switches to facilitate isolation, expand its telemetry in underground and overhead systems, and experiment with 3G distribution automation concepts to protect against damage to equipment caused by flooding.³⁷⁷ Grid New York could benefit from likewise expanding its benchmarking efforts within the industry and looking beyond the electric utility sector for innovative ways to integrate technology into its operations. The Commission encourages other utilities to engage in more benchmarking activities in an effort to improve system design and performance.

³⁶⁹ *Id.*

³⁷⁰ *Id.*

³⁷¹ *Id.*; May 21, 2013 Interview with Keith McAfee (Vice President of New York Operations for National Grid) [hereinafter McAfee Interview].

³⁷² McAfee Interview; July 18, 2012 Email re: RE Some open items next steps E2E Emergency Response (NG-E-00293696).

³⁷³ McAfee Interview.

³⁷⁴ July 25, 2012 Email re: RE: PSC storm recommendation (NG-E-00288289).

³⁷⁵ End-to-End Emergency Response (NG-E-00291321-325) (providing an update on Grid's E2E emergency response items post Hurricane Irene and Tropical Storm Lee); McAfee Interview (noting that Grid's current OMS will be phase out).

³⁷⁶ Schimmenti Interview; Miksad Transcript at 100 (describing Con Ed's ongoing involvement in EEI benchmarking activities); Ivey Transcript at 76 (detailing how Con Ed is working with Florida Power and Light in the areas of logistics and storm response).

³⁷⁷ Schimmenti Interview; Dec. 11, 2012 Storm Hardening CLA 2012 12 11 rev 3 3G SS GS OH Gas.pptx (CE_0035392-0035406) (outlining Con Ed's Storm Hardening proposed system design initiatives).

Recommendations:

- **Grid New York should continue to improve its data gathering during an emergency to facilitate a more robust after-action and benchmarking analysis.**
- **Grid New York should expand its benchmarking efforts, including by benchmarking its activities against reference points outside of the electric utility sector.**

7.10 CONCLUSION

The breadth of the Commission's investigative findings demonstrates a clear need for industry reform. Time and again, the New York utility industry has failed to improve despite repeated criticism from the PSC and customers. Ratepayers deserve better performance from their utility companies, especially during major storm events. The Commission's investigative findings underscore the need for New York's IOUs to reform how they prepare and respond to major storm events. The devastation caused by Hurricane Sandy and the other Recent Storms illustrate just how important advance planning and proper coordination are to protecting and serving customers. The Commission has serious concerns whether New York's IOUs are adequately prepared to deal with the next major storm event. However, the Commission's recommendations and findings present an opportunity for the industry to improve. As such, the Commission strongly recommends that New York's IOUs implement the recommendations stated herein under the governance of a now strengthened PSC.

8 APPENDIX

8.1 GOVERNOR'S PRESS RELEASE LAUNCHING MORELAND COMMISSION

Contact Information:

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Andrew M. Cuomo – *Governor*

Governor Cuomo Launches Moreland Commission to Investigate and Study Utility Companies' Storm Preparation and Management; Recommend Reforms to Overhaul Regulation of Entire System to Better Deal With Emergencies

Commission to Investigate Companies' Preparedness and Make Recommendations to Improve Future Response to Major Weather Incidents

Albany, NY (November 13, 2012)

Governor Andrew M. Cuomo today signed an Executive Order to establish a commission under the Moreland Act that will investigate the response, preparation, and management of New York's power utility companies with major storms hitting the state over the past two years, including Hurricanes Sandy and Irene, and Tropical Storm Lee.

The Commission will be tasked to undertake a thorough review of all actions taken by the power companies before and after these emergencies, and make specific recommendations to reform and modernize oversight, regulation and management of New York's power delivery services.

"From Hurricane Irene, Tropical Storm Lee, to Hurricane Sandy, over the past two years New York has experienced some of the worst natural disasters in our state's history," Governor Cuomo said.

“As we adjust to the reality of more frequent major weather incidents, we must study and learn from these past experiences to prepare for the future.”

The Commission’s mandate includes examining and making recommendations to reform the overlapping responsibilities and missions of NYPA, LIPA, NYSERDA, and the Public Service Commission. As evidenced by Hurricane Sandy, the existing labyrinth of regulatory bodies, state agencies and authorities, and quasi-governmental bodies has contributed to a dysfunctional utility system.

The Commission will have the power to subpoena and examine witnesses under oath. The Commission members include:

- Co-Chair Robert Abrams**, former Attorney General of New York State
- Co-Chair Benjamin Lawsky**, Superintendent of the Department of Financial Services
- Peter Bradford**, former Chair of the Public Service Commission
- Tony Collins**, President of Clarkson University
- John Dyson**, former Chairman of the New York Power Authority
- Rev. Floyd Flake**, Senior Pastor of Greater Allen African Methodist Episcopal Cathedral
- Mark Green**, former New York City Public Advocate
- Joanie Mahoney**, Onondaga County Executive
- Kathleen Rice**, Nassau County District Attorney
- Dan Tishman**, Vice Chairman at AECOM Technology Corporation, and Chairman and CEO of Tishman Construction Corporation

The Executive Order establishing the Commission is below:

E X E C U T I V E O R D E R

DESIGNATION PURSUANT TO SECTION 6 OF THE EXECUTIVE LAW

WHEREAS, beginning on October 29, 2012, Hurricane Sandy caused massive power outages throughout Long Island, New York City, Westchester, Rockland and surrounding counties, affecting over two million customers, including ninety percent of customers on Long Island; and

WHEREAS, storm emergencies have effected, as well as thousands of businesses and private and public services providers charged with the protection of the health and safety of New Yorkers, including hospitals, adult homes, nursing homes and other residences serving persons with disabilities and other special needs; and

WHEREAS, storm emergencies crippled major public transportation systems, including mass transportation, bridges, tunnels, roads and several waterways, throughout the region; and

WHEREAS, the loss of power adversely affected a variety of other critical systems including communications services, gasoline terminals and stations, natural gas delivery to residences and steam delivery to large residential and commercial complexes, and

WHEREAS, on November 7, 2012, a Nor'easter with snow exacerbated the suffering, property damage and power outages sustained in some of the same areas affected by Hurricane Sandy; and

WHEREAS, such sustained disruption of the power supply and its cascading damage to other critical systems in many communities, neighborhoods and industrial areas, as well as the continued prevalence of downed utility lines, has jeopardized the health and safety of New Yorkers and undermined public confidence in the public utility service system; and

WHEREAS, in August and September of 2011, as a result of Hurricane Irene and Tropical Storm Lee over one million customers in New York State lost power and some communities suffered prolonged power outages which not only impacted Long Island, New York City, Westchester, Rockland and surrounding counties, but also the counties of Albany, Broome, Chenango, Chemung, Clinton, Columbia, Delaware, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Montgomery, Oneida, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Tioga, Tompkins, Warren and Washington; and

WHEREAS, in December 2008, an ice storm caused over 300,000 power outages in New York State, and many customers were still without power a week after the storm; and

WHEREAS, these recent and past events indicate that utility emergency response planning and procedures must anticipate future emergencies and be prepared.

WHEREAS, utilities are required to provide safe, adequate and reliable services to the public; and

WHEREAS, while the New York State Public Service Commission is the regulatory agency charged with oversight of private utilities in the State of New York, there exists a labyrinth of other regulatory bodies, state agencies, authorities and quasi-governmental bodies including but not limited to the New York Power Authority, the Long Island Power Authority, and the New York State Energy and Research Development Authority, whose overlapping mandates, jurisdiction and responsibilities have contributed to a dysfunctional utility system; and

WHEREAS, serious questions have been raised about the adequacy of utility management, structures, resources, the current regulatory framework and oversight to ensure effective preparation for and response to natural disasters by utilities in this State, particularly in light of the increasing frequency and intensity of such disasters as well as the licensing, certification, supervision and regulation of the power industry in New Yorker under existing law; and

WHEREAS, to maintain public confidence in the provision of vital services by utilities, it is manifestly in the public interest to study, examine, investigate and review each and every component of the provision of power to New York State: and

WHEREAS, Article IV, Section 3, of the New York Constitution vests the Governor with the obligation to take care that the laws are faithfully executed;

NOW, THEREFORE, I, ANDREW M. CUOMO, Governor of the State of New York, by virtue of the authority vested in me by the Constitution and laws of the State of New York, do hereby order as follows:

1. Pursuant to Section 6 of the Executive Law, I hereby appoint a Commission to: (A) study, examine, investigate and review: (i) the emergency preparedness and response of utilities during and following emergency weather events, including the performance of the utilities during and following emergency weather events; (ii) the adequacy of present laws, rules, regulations, practices and procedures with respect to utilities' emergency preparedness and response; (iii) the adequacy of existing oversight and enforcement mechanisms; (iv) the structure, organization, ownership, financing, control, management and practices of the utilities as they affect emergency preparedness and response; and (v) the provision of utility services to New York State under the existing legal regulatory framework, including but not limited to the jurisdiction, responsibilities and missions of the New York Power Authority, the Long Island Power Authority, the New York State Energy and Research Development Authority, as well as the Public Service Commission; (B) report and make recommendations for legislative, policy and regulatory changes, as well as reforms as deemed appropriate in utility structure, management and practices, to best protect and serve the public's interest with respect to emergency preparedness and response, and the provision of safe, reliable, responsive utility services; and (C) review any other matters or activities which may affect the issues herein before specified;

2. The Commission is hereby empowered to subpoena and enforce the attendance of witnesses; to administer oaths or affirmations and examine witnesses under oath; to require the production of any books, records or papers deemed relevant or material to any investigation, examination or review; and to perform any other functions that are necessary or appropriate to fulfill the duties and

responsibilities of office, and I hereby give and grant to the Commission all powers and authorities which may be given or granted to persons appointed by me for such purpose under authority of Section 6 of the Executive Law. The Commission may exercise any such powers in cooperation with any other body or government agency.

3. The Commission shall provide a report and recommendations at the conclusion of its work, and may issue interim, preliminary and periodic reports and recommendations.

4. Within this Executive Order, "utilities" refers to the entities engaged in the provision of electric, gas and steam.

5. Every State department, agency, office, division, board, bureau, council, authority and public benefit corporation shall cooperate with the Commission and shall furnish such information and assistance as the Commission determines is reasonably necessary to fulfill its duties.

G I V E N under my hand and the Privy Seal of the State in the City of Albany this thirteenth day of November in the year two thousand twelve.

BY THE GOVERNOR

Secretary to the Governor

8.2 2013-14 STATE BUDGET REVISIONS TO PUBLIC SERVICE LAW

PART X of A3007-D/S2607-D, signed by the Governor as Chapter 57 of the Laws of 2013

Section 1. Section 2 of the public service law is amended by adding a new subdivision 14 to read as follows:

14. The term "combination gas and electric corporation," when used in sections twenty-five-a, sixty-five and sixty-six of this chapter, includes any gas corporation operating in New York under common ownership with an electric corporation operating in New York or any electric corporation operating in New York under common ownership with a gas corporation operating in New York, or any successor of either such corporation; provided, however, that such term shall not include municipally-owned utilities, and shall not include any generating facilities owned or operated by either such corporation or any common owner thereof, or any subsidiary of such common owner.

§ 2. The public service law is amended by adding a new section 25-a to read as follows:

§ 25-a. Combination gas and electric corporations; administrative sanctions; recovery of penalties. Notwithstanding sections twenty-four and twenty-five of this article: 1. Every combination gas and electric corporation and the officers thereof shall adhere to every provision of this chapter and every order or regulation adopted under authority of this chapter so long as the same shall be in force.

2. (a) The commission shall have the authority to assess a civil penalty against a combination gas and electric corporation and the officers thereof subject to the jurisdiction, supervision, or regulation pursuant to this chapter in an amount as set forth in this section. In determining the amount of any penalty to be assessed pursuant to this section, the commission shall consider: (i) the seriousness of the violation for which a penalty is sought; (ii) the nature and extent of any previous violations for which penalties have been assessed against the corporation or officer; (iii) whether there was knowledge of the violation; (iv) the gross revenues and financial status of the corporation; and (v) such other factors as the commission may deem appropriate and relevant. The remedies provided by this subdivision are in addition to any other remedies provided in law.

(b) Whenever the commission has reason to believe that a combination gas and electric corporation or such officers thereof should be subject to imposition of a civil penalty as set forth in this subdivision, it shall notify such corporation or officer. Such notice shall include, but shall not be limited to: (i) the date and a brief description of the facts and nature of each act or failure to act for which such penalty is proposed; (ii) a list of each statute, regulation or order that the commission alleges has been violated; and (iii) the amount of each penalty that the commission proposes to assess.

© Whenever the commission has reason to believe that a combination gas and electric corporation or such officers thereof should be subject to imposition of a civil penalty or penalties as set forth in this subdivision, the commission shall hold a hearing to demonstrate why the proposed penalty or penalties should be assessed against such combination gas and electric corporation or such officers.

3. Any combination gas and electric corporation determined by the commission to have failed to reasonably comply as shown by a preponderance of the evidence with a provision of this chapter, regulation or an order adopted under authority of this chapter so long as the same shall be in force shall forfeit a sum not exceeding the greater of one hundred thousand dollars or two one-hundredths of one percent of the annual intrastate gross operating revenue of the corporation, not including taxes paid to and revenues collected on behalf of government entities, constituting a civil penalty for each and every offense and, in the case of a continuing violation, each day shall be deemed a separate and distinct offense.

4. Notwithstanding the provisions of subdivision three of this section, any such combination gas and electric corporation determined by the commission to have failed to reasonably comply with a provision of this chapter, or an order or regulation adopted under the authority of this chapter specifically for the protection of human safety or prevention of significant damage to real property, including, but not limited to, the commission's code of gas safety regulations shall, if it is determined by the commission by a preponderance of the evidence that such safety violation caused or constituted a contributing factor in bringing about: (a) a death or personal injury; or (b) damage to real property in excess of fifty thousand dollars, forfeit a sum not to exceed the greater of:

(i) two hundred fifty thousand dollars or three one-hundredths of one percent of the annual intrastate gross operating revenue of the corporation, not including taxes paid to and revenues collected on behalf of government entities, whichever is greater, constituting a civil penalty for each separate and distinct offense; provided, however, that for purposes of this paragraph, each day of a continuing violation shall not be deemed a separate and distinct offense. The total period of a continuing violation, as well as every distinct violation, shall be similarly treated as a separate and distinct offense for purposes of this paragraph; or

(ii) the maximum forfeiture determined in accordance with subdivision three of this section.

5. Notwithstanding the provisions of subdivision three or four of this section, a combination gas and electric corporation determined by the commission to have failed to reasonably comply by a preponderance of the evidence with a provision of this chapter, or an order or regulation adopted under authority of this chapter, designed to protect the overall reliability and continuity of electric service, including but not limited to the restoration of electric service following a major outage event or emergency, shall forfeit a sum not to exceed the greater of:

(a) five hundred thousand dollars or four one-hundredths of one percent of the annual intrastate gross operating revenue of the corporation, not including taxes paid to and revenues collected on behalf of government entities, whichever is greater, constituting a civil penalty for each separate and distinct offense; provided, however, that for purposes of this paragraph each day of a continuing violation shall not be deemed a separate and distinct offense. The total period of a continuing violation, as well as every distinct violation shall be similarly treated as a separate and distinct offense for purposes of this paragraph; or

(b) the maximum forfeiture determined in accordance with subdivision three of this section.

6. Any officer of any combination gas and electric corporation determined by the commission to have violated the provisions of subdivision three, four, or five of this section, and who knowingly violates a provision of this chapter, regulation or an order adopted under authority of this chapter so long as the same shall be in force shall forfeit a sum not to exceed one hundred thousand dollars constituting a civil penalty for each and every offense and, in the case of a continuing violation, each day shall be deemed a separate and distinct offense.

7. Any such assessment may be compromised or discontinued by the commission. All moneys recovered pursuant to this section, together with the costs thereof, shall be remitted to, or for the benefit of, the ratepayers in a manner to be determined by the commission.

8. Upon a failure by a combination gas and electric corporation or officer to remit any penalty assessed by the commission pursuant to this section, the commission, through its counsel, may institute an action or special proceeding to collect the penalty in a court of competent jurisdiction.

9. Any payment made by a combination gas and electric corporation or the officers thereof as a result of an assessment as provided in this section, and the cost of litigation and investigation related to any such assessment, shall not be recoverable from ratepayers.

10. In construing and enforcing the provisions of this chapter relating to penalties, the act of any director, officer, agent or employee of a combined gas and electric corporation acting within the scope of his or her official duties or employment shall be deemed to be the act of such corporation.

11. It shall be a violation of this chapter should a director, officer or employee of a public utility company, corporation, person acting in his or her official duties or employment, or an agent acting on behalf of an employer take retaliatory personnel action such as discharge, suspension, demotion, penalization or discrimination against an employee for reporting a violation of a provision of this chapter of an order or regulation adopted under the authority of this chapter, including, but not limited to, those governing safe and adequate service, protection of human safety or prevention of significant damage to real property, including, but not limited to, the commission's code of gas safety. Nothing in this subdivision shall be deemed to diminish the rights, privileges or remedies of any employee under any other law or regulation, including but not limited to article twenty-C of the labor law and section seventy-five-b of the civil service law, or under any collective bargaining agreement or employment contract.

§ 3. Section 65 of the public service law is amended by adding two new subdivisions 14 and 15 to read as follows:

14. In conjunction with a management and operations audit undertaken pursuant to subdivision nineteen of section sixty-six of this article or upon its own motion, the commission shall review the capability, including but not limited to, the capability to implement emergency response plans and restoration, of each electric corporation to provide safe, adequate, and reliable service. Upon good cause shown, and after a hearing in accordance with the commission's rules and regulations, the commission may direct such corporation to comply with additional and more stringent terms and conditions of service than existed prior to the commencement of the management and operations audit, and may, in addition, assess the continued operation of such corporation as the provider of electric service in its service territory and propose, and act upon, such measures as are necessary to ensure safe and adequate service; provided, however, that nothing in this subdivision limits the commission's authority to undertake the actions set forth pursuant to section twenty-four, twenty-five or twenty-five-a of this chapter.

15. The chief executive officer of each combination gas and electric corporation shall certify to the commission on or before March fifteenth of each year that such corporation has internal controls, policies and procedures designed to ensure compliance with the requirements of this chapter and any rules, regulations, orders and procedures adopted thereto, including the obligation that such corporation provide safe and adequate service.

§ 4. Subdivisions 19 and 21 of section 66 of the public service law, subdivision 19 as added by chapter 556 of the laws of 1976 and the closing paragraph of subdivision 19 as added by chapter 586 of the laws of 1986 and subdivision 21 as added by chapter 718 of the laws of 1980, are amended and a new subdivision 1-a is added to read as follows:

1-a. Review the annual capital expenditure of each combination gas and electric corporation and may order such improvement in the manufacture, conveying, transportation, distribution or supply of gas, in the manufacture, transmission or supply of electricity, or in the methods employed by such corporation as in the commission's judgment is adequate, just and reasonable.

19. (a) The commission shall have power to provide for management and operations audits of gas corporations and electric corporations. Such audits shall be performed at least once every five years for combination gas and electric [companies] corporations, as well as for straight gas corporations having annual gross revenues in excess of two hundred million dollars. The audit shall include, but not be limited to, an investigation of the company's construction program planning in relation to the needs of its customers for reliable service [and], an evaluation of the efficiency of the company's operations, **recommendations with**

respect to same, and the timing with respect to the implementation of such recommendations. The commission shall have discretion to have such audits performed by its staff, or by independent auditors.

In every case in which the commission chooses to have the audit provided for in this subdivision **or pursuant to subdivision fourteen of section sixty-five of this article** performed by independent auditors, it shall have authority to select the auditors, and to require the company being audited to enter into a contract with the auditors providing for their payment by the company. Such contract shall provide further that the auditors shall work for and under the direction of the commission according to such terms as the commission may determine are necessary and reasonable. **The commission shall have authority to direct the company to implement any recommendations resulting from such audits that it finds to be necessary and reasonable.**

(b) Each corporation subject to an audit under this subdivision shall file a report with the commission within thirty days after issuance of such audit detailing its plan to implement the recommendations made in the audit. After review of such plan, the commission may require each combined electric and gas corporation amend its plan in a particular manner. Such plan shall thereafter become enforceable upon approval by the commission. The commission shall have power to commence a proceeding to examine any such corporation's compliance with the recommendations of such audit.

© Upon the application of a gas or electric corporation for a major change in rates as defined in subdivision twelve of this section, the commission shall review that corporation's compliance with the directions and recommendations made previously by the commission, as a result of the most recently completed management and operations audit. The commission shall incorporate the findings of such review in its opinion or order, **and such findings shall be enforceable by the commission.**

21. **[The commission shall require every electric corporation to submit storm plans to the commission for review and approval at such times and in such detail and form as the commission shall require, provided, however, that the same shall be filed at least annually.] (a) Each electric corporation subject to section twenty-five-a of this chapter shall annually, on or before December fifteenth, submit to the commission an emergency response plan for review and approval. The emergency response plan shall be designed for the reasonably prompt restoration of service in the case of an emergency event, defined for purposes of this subdivision as an event where widespread outages have occurred in the service territory of the company due to storms or other causes beyond the control of the company. The emergency response plan shall include, but need not be limited to, the following: (i) the identification of management staff responsible for company operations during an emergency; (ii) a communications system with customers during an emergency that extends beyond normal business hours and business conditions; (iii) identification of and outreach plans to customers who had documented their need for essential electricity for medical needs; (iv) identification of and outreach plans to customers who had documented their need for essential electricity to provide critical telecommunications, critical transportation, critical fuel distribution services or other large-load customers identified by the commission; (v) designation of company staff to communicate with local officials and appropriate regulatory agencies; (vi) provisions regarding how the company will assure the safety of its employees and contractors; (vii) procedures for deploying company and mutual aid crews to work assignment areas; (viii) identification of additional supplies and equipment needed during an emergency; (ix) the means of obtaining additional supplies and equipment; (x) procedures to practice the emergency response plan; (xi) appropriate safety precautions regarding electrical hazards, including plans to promptly secure downed wires within thirty-six hours of notification of the location of such downed wires from a municipal emergency official; and (xii) such other additional information as the commission may require. Each such corporation shall, on an annual basis, undertake drills implementing procedures to practice its emergency management plan.**

The commission may adopt additional requirements consistent with ensuring the reasonably prompt restoration of service in the case of an emergency event.

(b) After review of a corporation's emergency response plan, the commission may require such corporation to amend the plan. The commission may also open an investigation of the corporation's plan to determine its sufficiency to respond adequately to an emergency event. If, after hearings, the commission finds a material deficiency in the plan, it may order the company to make such modifications that it deems reasonably necessary to remedy the deficiency.

© The commission is authorized to open an investigation to review the performance of any corporation in restoring service or otherwise meeting the requirements of the emergency response plan during an emergency event. If, after evidentiary hearings or other investigatory proceedings, the commission finds that the corporation failed to reasonably implement its emergency response plan or the length of such corporation's outages were materially longer than they would have been, because of such corporation's failure to reasonably implement its emergency response plan, the commission may deny the recovery of any part of the service restoration costs caused by such failure, commensurate with the degree and impact of the service outage; provided, however, that nothing herein limits the commission's authority to otherwise commence a proceeding pursuant to sections twenty-four, twenty-five and twenty-five-a of this chapter.

(d) The commission shall certify to the department of homeland security and emergency services that each such corporation's emergency response plan is sufficient to ensure to the greatest extent feasible the timely and safe restoration of energy services after an emergency in compliance with the requirements of this chapter.

© The filing of each emergency response plan required under paragraph (a) of this subdivision shall also include a copy of all written mutual assistance agreements among utilities.

(f) Each electric corporation shall file with the county executive or the chief elected official of a county for each county within its service territory the most recent approved copy of the emergency response plan required pursuant to this section. For the purposes of an electric corporation operating within the city of New York, such corporation shall file the most recent approved emergency response plan with the emergency management office of the city of New York.

(g) The commission shall provide access to such emergency response plan pursuant to article six of the public officers law.

§ 5. Section 68 of the public service law, as amended by chapter 52 of the laws of 1940, is amended to read as follows:

§ 68. **[Approval of incorporation and franchises; certificate] Certificate of public convenience and necessity. 1. Certificate required.** No gas corporation or electric corporation shall begin construction of a gas plant or electric plant without first having obtained the permission and approval of the commission. No such corporation shall exercise any right or privilege under any franchise hereafter granted, or under any franchise heretofore granted but not heretofore actually exercised, or the exercise of which shall have been suspended for more than one year, without first having obtained **[the permission and approval of] a certificate of public convenience and necessity issued by** the commission. Before such certificate shall be issued a certified copy of the charter of such corporation shall be filed in the office of the commission, together with a verified statement of the president and secretary of the corporation, showing that it has received the required consent of the proper municipal authorities. The commission shall have power to grant the permission and approval herein specified whenever it shall after due hearing determine that such construction or such exercise of the right, privilege or franchise is **[necessary or] convenient and necessary** for the **public service. In making such a determination, the commission shall consider the economic feasibility of the corporation, the corporation's ability to finance improvements of a gas plant or electric plant, render safe, adequate and reliable service, and provide just and reasonable rates, and**

whether issuance of a certificate is in the public interest. Except as provided in article [fourteen-a] **fourteen-A** of the general municipal law, no municipality shall build, maintain and operate for other than municipal purposes any works or systems for the manufacture and supplying of gas or electricity for lighting purposes without a certificate of authority granted by the commission. If the certificate of authority is refused, no further proceedings shall be taken by such municipality before the commission, but a new application may be made therefor after one year from the date of such refusal.

2. Revocation or modification of certificate. The commission may commence a proceeding, conducted in accordance with the commission's rules and regulations, to revoke or modify a combined electric and gas corporation's certificate as it relates to such corporation's service territory or any portion thereof based on findings of repeated violations of this chapter or rules or regulations adopted thereto that demonstrate a failure of such corporation to continue to provide safe and adequate service. Whenever the commission has reason to believe that such corporation's certificate may be subject to revocation or modification, it shall notify such corporation of the facts and nature of each act or failure to act allegedly warranting such revocation or modification, and the statute, regulation or order allegedly violated, and otherwise consider the following factors:

(a) the factors identified in subdivision one of this section for issuance of a certificate of public convenience and necessity;

(b) whether another person, firm or corporation is qualified, available, and prepared to provide alternative service that is adequate to serve the public convenience and necessity, and that the transition to such alternative person, firm or corporation is in the public interest; and

© upon any other standards and procedures deemed necessary by the commission to ensure continuity of safe and adequate service, and due process.

§ 6. Paragraphs a and b of subdivision 1 of section 765 of the general business law, as amended by chapter 685 of the laws of 1994, are amended to read as follows:

a. Failure to comply with any provision of this article shall subject an excavator or an operator to a civil penalty of up to [one] **two** thousand **five hundred** dollars for the first violation and up to an additional [seven] **ten** thousand [five hundred] dollars for each succeeding violation [which] **that** occurs [in connection with the entire self-same excavation or demolition activity] within a [two] **twelve** month period.

b. The penalties provided for by this article shall not apply to an excavator who damages an underground facility due to the failure of the operator to comply with any of the provisions of this article nor shall in such instance the excavator be liable for repairs as prescribed in subdivision [five] **four** of this section.

§ 7. This act shall take effect immediately.

8.3 SPEAKERS AT STATEWIDE PUBLIC HEARINGS

(*denotes witnesses not affiliated with an organization)

Manhattan, December 6, 2012:

- Richard Sedano, Principal, Director of US Programs and Board member, Regulatory Assistance Project
- Senator Michael Gianaris, New York State Senate
- Irwin Redlener, Director, National Center for Disaster Preparedness
- Dan Kartzman, President, Powersmith Home Energy Solutions
- Charles Bell, Programs Director, Consumer Union
- Jonathan Schrag, Board Member, Northeast Clean Heat & Power Initiative

Old Westbury, December 11, 2012:

- Gil Quiniones, President & CEO, New York Power Authority
- Edward Mangano, Nassau County Executive
- Steve Bellone, Suffolk County Executive
- Marissa Shorenstein, New York President, AT&T
- Helena Williams, President, Long Island Rail Road
- Matthew Cordaro, Chairman, Suffolk County LIPA Oversight Committee
- Peter Scalzi*
- Jonny Flaherty*
- Michael Gendron*
- Dave Denenberg, Nassau County Legislator
- Mark Cuthbertson, Councilman, Town of Huntington
- Edward Newman*
- Pedro Quintanilla*
- Seymour Spiegel*
- Jeff Greenfield*
- Richard Serchuk*
- Robert Ordan*
- Claudia Borecky*
- Annette Korzen*
- Joseph Sadowski*
- Neil Lewis*
- Rose Van Guilder, President, Alliance for Independent Long Island
- Daniel Karpen*
- Greg Fisher*
- Roger Scott Lewis
- 'Mr. Perlmutter'* [Full Name Not Recorded]
- Mike Fichtelman*
- Ghenya Grant*

Central Islip, December 20, 2012:

- Bruce Germano, Vice President of Customer Service, Long Island Power Authority
- Nicholas Lizanich, Vice President of Transmission and Distribution Systems, Long Island Power Authority
- Michael Hervey, Chief Operating Officer, Long Island Power Authority
- Thomas King, U.S. President, National Grid
- John Bruckner, LIPA President & Incident Commander, National Grid
- Thomas Beisner, Director of Electrical Service and Command Center, National Grid
- Mary Genoy, Vice President of Customer Services, National Grid

Queens, January 17, 2013:

- Sophie Dalani, Doctors Without Borders
- Hugh Weinberg, Office of Queens Borough President Helen Marshall
- Delores Orr*
- Howard Pollack, Office of New York City Council Speaker Christine Quinn
- Rachel Forde*
- Hayden Horsham*
- Lew Simon*
- Norman Silverman*
- Paul Lozowsky*
- Hank Lori*
- Sarah Mitchell*
- Danean Ferguson*
- Barbara Hillary*
- Queen Makkode*
- Jessica Roth*
- Reverend Alfred Cockfield, God's Battalion Church, Far Rockaway
- Assemblyman Phil Goldfeder, New York State Assembly (Far Rockaway)

Staten Island, January 23, 2013:

- Derek Tabacco, Guyon Rescue
- Anthony Navarino, Stephen Stiller Tunnel to Towers Foundation
- Joseph Carroll, District Manager, Community Board One
- Sandy Wolf, Staten Island Economic Development Corporation
- James Matteo, Chief of Staff, Councilman Otto
- Lorraine Matolla*

Purchase, January 24, 2013:

- Pat Anderson, United Way of Westchester and Putnam Counties
- Alex Gromack, Supervisor, Town of Clarkstown
- Howard Phillips, Supervisor, Town of Haverstraw
- Thomas Ryan, Longvale Homeowners
- Orrin Getz*

- Senator Bill Larkin, New York State Senate
- Linda Puglisi, Supervisor, Town of Cortland
- Evelyn Bauer, Project Hope
- Mary Jane Shimsky, Westchester County Legislator
- Assemblyman David Buchwald, New York State Assembly
- Nancy Petty*
- Felix Carcano*
- Assemblyman Steve Otis, New York State Assembly
- Richard Thomas, Councilmember, City of Mount Vernon
- Assemblywoman Shelley Mayer, New York State Assembly
- Jim Killoran, Executive Director, Habitat for Humanity
- Scott Pickup*

New Paltz, January 29, 2013:

- Art Snyder, Director, Ulster County Office of Emergency Management
- Ron Hicks, Deputy Commissioner of Strategic Planning and Economic Development, Dutchess County
- Phil Jameson*
- Assemblyman Steve Katz, New York State Assembly
- Michael Smith, President, New Paltz Regional Chamber of Commerce
- Seamus Leary, Deputy Commissioner for the Department of Emergency Services, Orange County
- 'Mr. Maher,' Office of State Senator Bill Larkin
- Dan Depew, Supervisor, Town of Wallkill
- Fawn Tantillo, former Ulster County Legislator
- Manna Jo Greene, Councilmember, Town of Rosendale

Lake Placid, February 20, 2013:

- Keith Zimmerman, St. Lawrence County Board of Legislators
- Don Jaquiss, Fire Coordinator, Franklin County
- Randy Preston, Supervisor, Town of Wilmington
- Rick Provost, Director of Emergency Services, Franklin County
- Brian LaFlure, Emergency Manager, Warren County
- Eric Day, Director of Emergency Services, Clinton County

Albany, March 6, 2013:

- William Black, Columbia County Emergency Management Director
- Roy Brown, Columbia County Public Safety Coordinator
- Kevin Neary, Schoharie County Acting Emergency Management Director
- John Nuzback, Schenectady County Fire Coordinator
- Paul Lent, Saratoga County Emergency Services Director
- John Layton, Albany County Sheriff's Department
- Bill Ansel-McCabe, Councilmember, Town on Middleburgh
- John Borst, Mayor, Village of Schoharie
- Alicia Terry, Planning Department, County of Schoharie

Binghamton, April 24, 2013

- Richard LaCount, Director of Emergency Management, Tioga County
- Peter Adreasen, former Supervisor, Town of Vestal
- Brian Parker, Cortland County Representative
- Andy Matviak, Mayor, Village of Sidney
- Alan Hertel, Executive Director of the United Way of Broome County
- Doug Rose, Fire Chief, Town of Vestal
- Brett Chellis, Director of Emergency Services, Broome County (also representing Debbie Preston, Supervisor, Broome County)
- Shelley Bierwiler, Community Chapter Executive of the American Red Cross – Southern Tier
- John Hroncich, B.A.E. Systems
- Sandy DeJohn, Utilities Manager, Binghamton University Campus
- Donald Castellucci, Supervisor, Town of Owego

8.4 LIPA PROFESSIONAL SERVICES³⁷⁸

Name	2011	2010	2009	2008	Totals
Navigant	\$3,040,082	\$8,679,303	\$8,605,584	\$7,741,901	\$28,066,870
Pace Global	\$693,556	\$997,380	\$1,245,867	\$492,289	\$3,429,092
Applied Energy Group	\$1,337,352	\$1,216,215	\$533,508	\$312,312	\$3,399,387
VanNess Feldman	\$628,483	\$708,361	\$881,300	\$825,102	\$3,043,246
KPMG	\$672,298	\$562,106	\$706,150	\$564,473	\$2,505,027
Morgan, Lewis and Bockius	\$732,418	\$738,010	\$747,925	\$0	\$2,218,353
Stone & Webster	\$139,818	\$474,246	\$826,227	\$554,141	\$1,994,432
PFM	\$770,982	\$133,449	\$1,001,756	\$0	\$1,906,187
Vichow & Krause	\$1,041,607	\$172,626	\$175,563	\$243,066	\$1,632,862
Unique Comp Inc.	\$486,534	\$456,093	\$332,252	\$316,686	\$1,591,565
Brattle Group	\$1,423,206	\$0	\$0	\$0	\$1,423,206
Carter, Ledyard & Mildum	\$441,818	\$105,382	\$288,936	\$352,347	\$1,188,483
Levitan	\$402,458	\$0	\$0	\$748,462	\$1,150,920
JP Investment	\$155,219	\$189,909	\$194,099	\$330,044	\$869,271
Certilman, Balin, Adler & Hyman	\$89,591	\$96,759	\$31,538	\$613,006	\$830,894
Black & Veatch	\$0	\$514,043	\$184,216	\$105,058	\$803,317
Rivkin & Radler	\$136,056	\$197,862	\$364,622	\$80,518	\$779,058
Thelen, Reid, Brown, Raysman & Steiner	\$0	\$0	\$232,921	\$451,015	\$683,936
Meyers-Reynolds	\$186,855	\$202,500	\$108,000	\$175,500	\$672,855
Lazar, Aptheker, Rosella & Yedid	\$32,031	\$576,613	\$11,472	\$35,489	\$655,605
Markets/National Grid	\$330,628	\$190,818	\$12,499	\$74,013	\$607,958
Hawkins, Delafield & Wood	\$189,798	\$85,373	\$186,647	\$59,593	\$521,411
Holland & Knight	\$53,382	\$242,496	\$209,536	\$8,609	\$514,023
Bear, Sterns & Co.	\$0	\$0	\$0	\$500,000	\$500,000
Zimmerman/Edelson	\$92,200	\$105,058	\$144,302	\$95,473	\$437,033
Standish	\$141,202	\$159,534	\$28,939	\$66,937	\$396,612
Sive, Paget and Riesel	\$19,328	\$49,347	\$5,983	\$313,572	\$388,230
Couch – White, LLP	\$171,429	\$7,220	\$42,948	\$118,395	\$339,992
Paul Weiss	\$0	\$0	\$0	\$293,289	\$293,289
Kenda	\$77,874	\$118,530	\$20,485	\$15,540	\$232,429
VHB	\$164,814	\$55,529	\$0	\$0	\$220,343
Read & Laiado	\$64,430	\$28,081	\$75,834	\$36,389	\$204,734
EEA, Inc.	\$0	\$74,769	\$2,933	\$61,399	\$139,101
Utility Integration Solutions	\$133,739	\$0	\$0	\$0	\$133,739
Epicor Software Corp.	\$1,500	\$49,062	\$9,996	\$26,730	\$87,288
Liberty Group	\$0	\$0	\$86,625	\$0	\$86,625

³⁷⁸ Compiled from LIPA, 'Long Island Power Authority Professional Services Invoices Paid By Vendor,' (3 pages).

Name	2011	2010	2009	2008	Totals
Littler Mendelson	\$9,131	\$12,881	\$64,257	\$0	\$86,269
Harris Beach	\$25,469	\$36,192	\$12,831	\$0	\$74,492
Bank of New York	\$0	\$0	\$0	\$68,988	\$68,988
CG Solutions	\$0	\$0	\$12,240	\$54,786	\$67,026
Allee, King, Rosen & Fleming	\$0	\$34,141	\$17,537	\$6,965	\$58,643
Shron LLP	\$49,679	\$0	\$0	\$0	\$49,679
Lewis, Johs, Avallone, Aviles	\$9,641	\$6,743	\$14,463	\$16,872	\$47,719
ImageWork Technologies	\$0	\$0	\$33,820	\$5,960	\$39,780
Ecology & Environment	\$38,802	\$0	\$0	\$0	\$38,802
Con Edison	\$0	\$34,460	\$0	\$0	\$34,460
Tronconi, Segarra & Hore	\$21,214	\$11,043	\$0	\$0	\$32,257
Power Grid 360	\$29,049	\$0	\$0	\$0	\$29,049
Buck	\$0	\$16,697	\$2,611	\$5,446	\$24,754
Tenrox	\$0	\$0	\$0	\$23,200	\$23,200
PSC	\$0	\$22,896	\$0	\$0	\$22,896
Xtensible Solutions	\$22,238	\$0	\$0	\$0	\$22,238
Incorporated Village of Poquott	\$0	\$0	\$17,095	\$3,623	\$20,718
Scenaria Partners	\$0	\$0	\$18,925	\$0	\$18,925
Siemens	\$0	\$0	\$18,731	\$0	\$18,731
Dempsey LLP	\$17,775	\$0	\$0	\$0	\$17,775
Burns & Roe Enterprises	\$16,500	\$0	\$0	\$0	\$16,500
Dewey & LeBoeuf	\$0	\$0	\$0	\$15,443	\$15,443
Moore Syndication	\$0	\$0	\$7,500	\$7,500	\$15,000
KEMA, Inc.	\$0	\$0	\$0	\$14,840	\$14,840
GAI Consultants	\$0	\$0	\$0	\$14,372	\$14,372
Energy Initiatives	\$0	\$1,050	\$5,400	\$4,600	\$11,050
Breslin Appraisal Co	\$1,250	\$5,000	\$0	\$3,000	\$9,250
Ruskin, Moscou, Evans & Faltischek	\$0	\$0	\$0	\$7,531	\$7,531
Integrity Treasury Solutions	\$0	\$0	\$0	\$6,920	\$6,920
CDW	\$0	\$0	\$5,635	\$0	\$5,635
Invision.com/Mindshift	\$0	\$2,093	\$2,025	\$0	\$4,118
Denise Stalls, Inc.	\$0	\$0	\$0	\$752	\$752
Carizana Limousine	\$0	\$0	\$0	\$312	\$312
Totals	\$14,091,436	\$17,369,870	\$17,531,733	\$15,872,458	\$64,865,497

8.5 NAVIGANT BILLING TO LIPA BY EMPLOYEE 2008-2012³⁷⁹

Employee	Year	LIPA Billing Rate*	LIPA Billable Hours	LIPA Costs	All Years Total
BACH, CHRISTOPHER S	2008	\$252	344	\$86,688	\$1,238,256
	2009	\$252	682	\$171,864	
	2010	\$252	1,179	\$297,108	
	2011	\$268	1,135	\$304,180	
	2012	\$353	1,072	\$378,416	
BHATTACHARJEE, ANINDITA	2008	\$191	1,481	\$282,871	\$742,580
	2009	\$233	1,213	\$282,629	
	2010	\$233	760	\$177,080	
	2011	\$0	0	\$0	
	2012	\$0	0	\$0	
BISSONETTE, LEAH	2008	\$297	755	\$224,235	\$776,655
	2009	\$297	1,550	\$460,350	
	2010	\$297	310	\$92,070	
	2011	\$0	0	\$0	
	2012	\$0	0	\$0	
BRADLEY, DANIEL R	2008	\$259	1,625	\$420,875	\$1,835,453
	2009	\$272	1,250	\$340,000	
	2010	\$297	1,125	\$334,125	
	2011	\$340	1,097	\$372,980	
	2012	\$353	1,041	\$367,473	
CLARKE, DAVID C	2008	\$283	1,292	\$365,636	\$878,555
	2009	\$297	885	\$262,845	
	2010	\$297	842	\$250,074	
	2011	\$0	0	\$0	
	2012	\$0	0	\$0	
DAVID, CELIA	2008	\$283	9	\$2,547	\$1,122,472
	2009	\$297	576	\$171,072	
	2010	\$297	668	\$198,396	
	2011	\$340	1,305	\$443,700	
	2012	\$353	869	\$306,757	
EVANS, WILLIAM A	2008	\$259	1,705	\$441,595	\$1,823,791
	2009	\$272	964	\$262,208	
	2010	\$272	1,059	\$288,048	
	2011	\$310	1,136	\$352,160	
	2012	\$322	1,490	\$479,780	

³⁷⁹ Information compiled from: Long Island Power Authority – ‘Navigant’s schedule of top earners,’ (IG: IV-C3b); LIPA(MC)000106171-3; and LIPA(MC)000109705-7.

Employee	Year	LIPA Billing Rate*	LIPA Billable Hours	LIPA Costs	All Years Total
GOLDSTEIN, BRIAN	2008	\$191	822	\$157,002	\$566,383
	2009	\$233	1,695	\$394,935	
	2010	\$233	62	\$14,446	
	2011	\$0	0	\$0	
	2012	\$0	0	\$0	
HERGERT, RAYMOND C	2008	\$240	2,081	\$499,440	\$1,642,934
	2009	\$272	1,687	\$458,864	
	2010	\$272	1,273	\$346,256	
	2011	\$310	970	\$300,700	
	2012	\$322	117	\$37,674	
HIGGINS, JOHN E	2008	\$283	750	\$212,250	\$1,177,171
	2009	\$297	881	\$261,657	
	2010	\$297	788	\$234,036	
	2011	\$340	699	\$237,660	
	2012	\$353	656	\$231,568	
HURLEY, PATRICK S	2008	\$394	78	\$30,732	\$1,991,094
	2009	\$414	407	\$168,498	
	2010	\$414	1,504	\$622,656	
	2011	\$488	1,224	\$597,312	
	2012	\$507	1,128	\$571,896	
KENDALL, ROBERT W	2008	\$322	3,408	\$1,097,376	\$4,554,783
	2009	\$349	2,951	\$1,029,899	
	2010	\$349	2,290	\$799,210	
	2011	\$393	2,450	\$962,850	
	2012	\$408	1,631	\$665,448	
KOUJAK, DIA D	2008	\$222	1,966	\$436,452	\$1,772,367
	2009	\$233	1,655	\$385,615	
	2010	\$252	833	\$209,916	
	2011	\$268	1,244	\$333,392	
	2012	\$278	1,464	\$406,992	
LOTTERHOS, KENNETH C	2008	\$283	1,205	\$341,015	\$1,067,661
	2009	\$297	950	\$282,150	
	2010	\$297	788	\$234,036	
	2011	\$340	619	\$210,460	
	2012	\$0	0	\$0	
OPPEL, LAURIE J	2008	\$394	574	\$226,156	\$1,093,577
	2009	\$414	746	\$308,844	
	2010	\$414	580	\$240,120	
	2011	\$488	317	\$154,696	
	2012	\$507	323	\$163,761	

Employee	Year	LIPA Billing Rate*	LIPA Billable Hours	LIPA Costs	All Years Total
SAVIN, THOMAS	2008	\$191	182	\$34,762	\$1,234,113
	2009	\$233	482	\$112,306	
	2010	\$233	647	\$150,751	
	2011	\$250	1,857	\$464,250	
	2012	\$278	1,698	\$472,044	
SONI, PARAG	2008	\$240	2,132	\$511,680	\$1,250,742
	2009	\$252	1,440	\$362,880	
	2010	\$252	521	\$131,292	
	2011	\$268	778	\$208,504	
	2012	\$322	113	\$36,386	
STATHOS, DAN T	2008	\$259	894	\$231,546	\$1,110,190
	2009	\$272	1,055	\$286,960	
	2010	\$272	1,054	\$286,688	
	2011	\$310	612	\$189,720	
	2012	\$322	358	\$115,276	
SWANK, DAVID B	2008	\$259	277	\$71,743	\$1,163,179
	2009	\$272	527	\$143,344	
	2010	\$272	1,433	\$389,776	
	2011	\$310	754	\$233,740	
	2012	\$322	1,008	\$324,576	
ZUKOF, DAVID	2008	\$201	860	\$172,860	\$1,334,871
	2009	\$201	1,382	\$277,782	
	2010	\$201	1,679	\$337,479	
	2011	\$250	1,797	\$449,250	
	2012	\$260	375	\$97,500	

* LIPA Billing Rates are approximate values based on the initial rate billed for an individual in each given year. It is possible that actual rates billed increased within any of those years from the values which are used here.

8.6 NAVIGANT BILLING TO LIPA BY DEPARTMENT 2007-2012

	Department	Markets & Planning	Operations	Customer Relations	Finance	Retail Services	Power Supply	Monthly Totals
	Invoice Recipient(s)	Elizabeth McCarthy	Elizabeth McCarthy, Michael Hervey	Francine DeMaio	Ernest Merle	Elizabeth McCarthy	Ernest Merle	
2007 ³⁸⁰	January	\$126,342	\$242,461	\$46,625	\$8,887	\$58,773	\$185,014	\$668,102
	February	\$207,649	\$124,157	\$5,616	\$14,515	\$36,432	\$194,450	\$582,819
	March	\$87,079	\$92,164	\$6,026	\$17,664	\$11,868	\$404,297	\$619,099
	April	\$134,711	\$161,827	\$0	\$26,963	\$31,653	\$0	\$355,153
	May	\$156,484	\$77,159	\$0	\$27,832	\$30,456	\$142,898	\$434,829
	June	\$159,544	\$97,456	\$3,803	\$13,186	\$31,188	\$187,526	\$492,701
	July	\$203,502	\$92,929	\$0	\$5,191	\$23,862	\$0	\$325,484
	August	\$254,668	\$106,670	\$0	\$0	\$37,894	\$65,551	\$464,783
	September	\$79,372	\$182,989	\$30,176	\$480	\$39,669	\$134,416	\$467,102
	October	\$296,694	\$91,323	\$0	\$14,776	\$35,192	\$314,899	\$752,884
	November	\$281,744	\$94,337	\$17,400	\$11,983	\$69,673	\$120,382	\$595,519
	December	\$246,248	\$113,381	\$0	\$35,520	\$32,090	\$99,984	\$527,223
		Totals	\$2,234,036	\$1,476,854	\$109,644	\$176,997	\$438,750	\$1,849,416

	Department	Markets & Planning	Operations	Customer Relations	Finance	Retail Services	Power Supply	Monthly Totals
	Invoice Recipient(s)	Elizabeth McCarthy, Sam Lee, Michael Deering	Michael Hervey, Elizabeth McCarthy	Francine DeMaio, Bruce Germano	Elizabeth McCarthy, Ken Kane, Ernest Merle	Bruce Germano	Elizabeth McCarthy	
2008 ³⁸¹	January	\$324,884	\$200,967	\$17,100	\$1,589	\$35,373	\$89,157	\$669,069
	February	\$311,230	\$176,514	\$11,320	\$10,490	\$34,593	\$81,378	\$625,525
	March	\$171,257	\$115,397	\$0	\$7,939	\$14,150	\$135,929	\$444,672
	April	\$179,289	\$0	\$4,245	\$987	\$41,884	\$133,670	\$360,075
	May	\$371,037	\$113,919	\$2,830	\$6,277	\$27,734	\$86,774	\$608,571
	June	\$275,745	\$82,612	\$2,547	\$19,075	\$24,338	\$149,746	\$554,064
	July	\$279,177	\$146,205	\$0	\$17,777	\$37,678	\$62,094	\$542,931
	August	\$265,103	\$102,574	\$8,613	\$20,175	\$39,501	\$131,241	\$567,207
	September	\$245,639	\$165,524	\$594	\$30,240	\$0	\$177,271	\$619,268
	October	\$369,969	\$467,719	\$0	\$4,080	\$0	\$269,621	\$1,111,389
	November	\$242,946	\$143,619	\$22,083	\$35,627	\$0	\$278,789	\$723,065
	December	\$170,221	\$3,209	\$0	\$45,267	\$0	\$254,981	\$473,678
		Totals	\$3,206,498	\$1,718,260	\$69,332	\$199,522	\$255,251	\$1,850,650

³⁸⁰ Compiled from Navigant Consulting, Inc., Invoices (2007) (LIPA(MC)000136172-140972).

³⁸¹ Compiled from Navigant Consulting, Inc., Invoices (2008) (LIPA(MC)000140973-146864).

	Department	Markets & Planning	Operations	Customer Relations	Finance	Retail Services	Power Supply	
	Invoice Recipient(s)	Paul DeCotis, Michael Hervey, Jim Parmalee, Michael Deering, Elizabeth McCarthy, Sam Lee	Michael Hervey, Elizabeth McCarthy	Francine DeMaio, Bruce Germano	Ernest Merle, Elizabeth McCarthy	Bruce Germano	Rick Shansky, Elizabeth McCarthy, Michael Deering, Ernest Merle, Sam Lee, Paul DeCotis	Monthly Totals
2009 ³⁸²	January	\$136,669	\$296,396	\$45,171	\$9,365	\$0	\$321,061	\$808,663
	February	\$99,292	\$118,511	\$0	\$816	\$0	\$286,104	\$504,724
	March	\$164,886	\$145,645	\$0	\$0	\$0	\$88,865	\$399,396
	April	\$66,966	\$161,728	\$15,624	\$3,016	\$0	\$93,982	\$341,316
	May	\$272,873	\$196,570	\$0	\$0	\$0	\$580,376	\$1,049,819
	June	\$151,566	\$149,381	\$0	\$0	\$0	\$165,398	\$466,344
	July	\$175,306	\$348,645	\$0	\$0	\$0	\$153,888	\$677,839
	August	\$221,852	\$461,188	\$0	\$0	\$0	\$141,342	\$824,382
	September	\$250,619	\$0	\$0	\$0	\$0	\$271,857	\$522,476
	October	\$224,844	\$427,733	\$7,623	\$3,672	\$0	\$136,050	\$799,922
	November	\$232,125	\$342,265	\$0	\$44,473	\$11,076	\$222,264	\$852,203
	December	\$205,890	\$142,438	\$15,687	\$11,696	\$32,319	\$186,729	\$594,758
		Totals	\$2,202,889	\$2,790,500	\$84,105	\$73,038	\$43,394	\$2,647,915

	Department	Markets & Planning	Operations	Customer Relations	Finance	Retail Services	Power Supply	
	Invoice Recipient(s)	David Clarke, Ed Petrocelli, Jim Parmalee, Paul DeCotis, John Franchesina	Michael Hervey	Francine DeMaio, Bruce Germano	Ernest Merle, Tim Sullivan	Bruce Germano	Rick Shansky	Monthly Totals
2010 ³⁸³	January	\$158,251	\$365,172	\$12,663	\$8,723	\$0	\$195,576	\$740,386
	February	\$144,718	\$309,024	\$0	\$0	\$41,562	\$136,481	\$631,785
	March	\$168,263	\$351,303	\$0	\$0	\$9,255	\$68,970	\$597,791
	April	\$122,368	\$420,496	\$0	\$11,470	\$0	\$147,650	\$701,983
	May	\$147,284	\$515,609	\$0	\$930	\$0	\$63,805	\$727,628
	June	\$40,847	\$469,314	\$0	\$7,300	\$0	\$0	\$517,461
	July	\$155,292	\$435,524	\$0	\$14,126	\$0	\$84,091	\$689,032
	August	\$178,193	\$0	\$0	\$6,645	\$0	\$41,640	\$226,478
	September	\$297,583	\$681,256	\$0	\$61,958	\$0	\$0	\$1,040,797
	October	\$129,561	\$421,401	\$12,730	\$42,787	\$0	\$0	\$606,479
	November	\$172,587	\$306,694	\$0	\$50,728	\$0	\$0	\$530,008
	December	\$161,388	\$248,468	\$0	\$5,006	\$0	\$0	\$414,862
		Totals	\$1,876,336	\$4,524,260	\$25,393	\$209,674	\$50,817	\$738,213

³⁸² Compiled from Navigant Consulting, Inc., Invoices (2009) (LIPA(MC)000146865-153005).

³⁸³ Compiled from Navigant Consulting, Inc., Invoices (2010) (LIPA(MC)000153006-157980).

	Department	Markets & Planning	Operations	Customer Relations	Finance	Retail Services	
	Invoice Recipient(s)	David Clarke, Ed Petrocelli, Jim Parmalee, Paul DeCotis, John Franchesina	Michael Hervey	Francine DeMaio, Bruce Germano	Ernest Merle, Tim Sullivan	Bruce Germano	Monthly Totals
2011³⁸⁴	January	\$206,277	\$303,756	\$36,113	\$310	\$0	\$546,456
	February	\$71,417	\$321,368	\$0	\$0	\$0	\$392,785
	March	\$197,725	\$0	\$0	\$0	\$0	\$197,725
	April	\$281,847	\$678,066	\$0	\$0	\$0	\$959,913
	May	\$441,809	\$328,838	\$0	\$2,790	\$57,350	\$830,787
	June	\$365,969	\$280,460	\$0	\$0	\$73,681	\$720,110
	July	\$303,812	\$303,267	\$0	\$3,100	\$73,689	\$683,867
	August	\$38,249	\$284,266	\$0	\$12,400	\$67,084	\$401,999
	September	\$56,899	\$432,906	\$0	\$37,737	\$46,207	\$573,748
	October	\$110,178	\$396,185	\$15,245	\$53,196	\$66,016	\$640,821
	November	\$236,193	\$284,692	\$29,437	\$45,499	\$107,972	\$703,793
	December	\$191,557	\$176,903	\$43,161	\$27,513	\$61,981	\$501,116
	Totals	\$2,501,933	\$3,790,707	\$123,957	\$182,545	\$553,979	\$7,153,120

	Department	Markets & Planning	Operations	Customer Relations	Finance	Retail Services	
	Invoice Recipient(s)	David Clarke, Ed Petrocelli, Jim Parmalee, Paul DeCotis, John Franchesina	Michael Hervey	Francine DeMaio, Bruce Germano	Ernest Merle, Tim Sullivan	Bruce Germano	Monthly Totals
2012³⁸⁵	January	\$154,424	\$261,373	\$22,045	\$3,220	\$57,002	\$498,063
	February	\$166,283	\$246,483	\$19,112	\$0	\$44,420	\$476,298
	March	\$274,211	\$227,167	\$21,180	\$0	\$33,846	\$556,405
	April	\$377,179	\$301,397	\$28,651	\$0	\$34,856	\$742,083
	May	\$360,824	\$273,704	\$25,698	\$0	\$39,976	\$700,202
	June	\$350,344	\$292,174	\$40,713	\$2,130	\$57,133	\$742,494
	July	\$306,309	\$240,771	\$0	\$0	\$41,827	\$588,907
	August	\$179,144	\$204,754	\$3,861	\$28,279	\$102,439	\$518,476
	September	\$255,611	\$253,731	\$0	\$28,034	\$26,956	\$564,332
	October	\$217,621	\$204,982	\$0	\$25,171	\$24,187	\$471,960
	November	\$179,746	\$143,591	\$0	\$56,363	\$40,589	\$420,288
	December	\$86,181	\$132,561	\$0	\$8,694	\$13,486	\$240,923
	Totals	\$2,907,877	\$2,782,686	\$161,260	\$151,891	\$516,716	\$6,520,430

³⁸⁴ Compiled from Navigant Consulting, Inc., Invoices (2011) (LIPA(MC)000157989-162297).

³⁸⁵ Compiled from Navigant Consulting, Inc., Invoices (2012) (LIPA(MC)000162305-166391).

8.7 MICHAEL HERVEY'S LINKEDIN PROFILE

Michael Hervey | LinkedIn Page 1 of 4



Michael Hervey
Experienced Utility Executive, Emerging Technology and Business Processes
Greater New York City Area | Utilities

Join LinkedIn and access Michael Hervey's full profile. It's free!

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- Get introduced to Michael Hervey
- Contact Michael Hervey directly

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Michael Hervey's Overview

Current	Emerging Technology and Business Processes at Navigant
Past	Chief Operating Officer and Acting CEO at Long Island Power Authority Sr. Vice President of Operations at Long Island Power Authority Transmission & Distribution Maintenance Engineer & Manager at Commonwealth Edison Company see all
Education	Hofstra University Iowa State University Gestalt Institute, Cleveland Ohio Edison Electric Institute
Recommendations	2 people have recommended Michael
Connections	396 connections
Websites	Personal Website Company Website

Michael Hervey's Summary

An energetic leader and change agent with results oriented executive management experience in both office and field environments. Known as a problem solver and strategic thinker with strong experience in outsourcing, operations, customer satisfaction, asset maintenance, asset management, capital programs, labor relations, information systems, technology, engineering and organizational design. Additional strengths in building consensus, budgeting, forecasting, resource planning, disaster recovery and facilitation. Is experienced in working with community groups, government officials and agencies, and board members.

Specialties
asset management, risk management, customer service, labor relations, leadership, negotiation, organizational development, policy analysis, project management, business strategy, Workplace safety, Project Management, Work Management, Asset Management, Overhead Construction, Underground Construction, Substation Construction, Business Processes, Business Controls, Smart Grid

Michael Hervey's Experience

Emerging Technology and Business Processes
Navigant
Public Company, 1001-5000 employees; NCI; Management Consulting Industry
January 2013 – Present (5 months)

An experienced and energetic leader and change agent with results oriented executive management experience in both office and field environments. Mr. Hervey has developed significant expertise in the following areas:

- Smart Grid
- Resource Planning
- Risk Management
- Supply Chain
- Asset Management Business Strategy
- Utility Services
- Business Processes
- Business Controls
- Budget Discipline
- Project Management
- Work Management
- Organizational Effectiveness
- Maintenance Processes
- Technology
- Construction -- Overhead, Underground, Substation
- Labor Relations
- Workplace safety
- Contractor Performance

<http://www.linkedin.com/in/michaelhervey1> 5/9/2013

- Engineering
- Administration

Chief Operating Officer and Acting CEO

Long Island Power Authority

Government Agency, 51-200 employees; Utilities industry
October 2000 – December 2012 (12 years 3 months)

Responsible for the effective creation and implementation of policy in all aspects of the Authority's business during a time of transition. Completed a strategic business model study which studied options of privatization, in-sourcing, and outsourcing arrangements. Negotiated transition of the T&D business to a new service provider under a public-private partnership model; a \$800M/yr 10 year contract aimed at first quartile performance in all aspects of the business. Expanded the efficiency and renewable energy programs as part of a low cost strategy to defer new generation. Continued leadership in renewable energy through the successful commercial operation of utility scale solar generation and implementation of a feed-in-tariff. Implemented best practice communication and outreach processes after major storms in 2011. Initiated a roadmap for rate structure reform and improved debt management. As part of a state-wide consortium of transmission owners, proposed sweeping upgrades to reduce congestion and address energy policy in New York. Retired obsolete generation and coordinated enabling transmission upgrades. He has over 30 years of experience in various operating roles in investor owned utilities and at the Authority.

Recent work includes development of SmartGrid strategies, implementation of storm hardening policies, capital expenditure value analysis, contract process metrics, maintenance policy review, substation and transmission system condition assessment, and reliability program policies, system spares methodology, improved planning criteria, root cause failure analysis, life cycle cost methodology and probability based risk analysis.

Sr. Vice President of Operations

Long Island Power Authority

Government Agency, 51-200 employees; Utilities industry
2000 – 2006 (6 years)

Management of T&D strategy, operation and maintenance policies and of the \$250+ million capital budget. Direct oversight responsibilities include system planning, engineering, fleet management, construction, reliability, project management, system operations, power restoration, NERC compliance, generation interconnections and the Company's ownership interest in Nine Mile Point nuclear generating plant. Functional oversight of customer service, customer back office, and shared services functions.

Implemented capital expenditure value analysis, departmental process metrics, maintenance policy review, substation and transmission system condition assessment, and reliability program policies, system spares methodology, improved planning criteria, root cause failure analysis, life cycle cost methodology and probability based risk analysis. Has created a far reaching Smart Grid implementation strategy and is conversant in Smart Grid technologies and information system solutions. Has developed strong process oriented business solutions to create sustainable business results.

Executive Director of T&D Operations 2003-2006

Director of T&D Operations 2000-2003

Transmission & Distribution Maintenance Engineer & Manager

Commonwealth Edison Company

Public Company, 5001-10,000 employees; E&C; Utilities industry
January 1996 – January 1999 (3 years 1 month)

Developed maintenance strategy and program for the Transmission and Distribution system using Reliability Centered Maintenance (RCM). Supervised a staff of 14 analysts and program administrators. Developed, managed, and forecasted a \$146 Million annual budget.

Implemented a Computerized Maintenance Management System that enabled tracking of T&D equipment, customization of maintenance programs, and maintenance program savings of 15%. Also developed a model for evaluating and prioritizing replacement of aged and obsolete equipment. Negotiated and implemented a customer/supplier interface agreement with six nuclear generating stations in compliance with nuclear generating station regulatory requirements, establishing clear lines of responsibility.

Substation Leader

Commonwealth Edison

Public Company; 5001-10,000 employees; E&C; Utilities industry
January 1981 – January 1990 (18 years 1 month)

Selected by the President to perform organization and process assessments of a distressed business unit during a turn-around situation, in a compressed time frame.

Substation Construction and Maintenance Manager

Commonwealth Edison Company

Public Company; 5001-10,000 employees; E&C; Utilities industry
January 1992 – January 1996 (3 years 1 month)

Directed unionized field construction, operating, and maintenance crews across 19 offices in 4 regions.

Managed over 2500 substation facilities and transmission lines.

Improved safety reportable accidents by 80% in 2 years through the use of collaborative employee safety teams.

Implemented project scheduling, incumbent skills training programs, field design & construct and process improvements, decreasing substation operation and maintenance costs by \$20 million while increasing reliability and essentially eliminating existing maintenance backlogs.

Worked collaboratively and negotiated with the labor union to implement key work rule changes that allowed resource scheduling flexibility between regions and reduced average crew size by 20% per crew.

Computer Field Services Engineer

Commonwealth Edison Company

Public Company; 5001-10,000 employees; E&C; Utilities industry
January 1992 – April 1993 (1 year 4 months)

Directed 20 computer technicians at 16 sites in the repair of over 5000 personal computers, network servers, routers, and process computers.

Selected by the Transmission Systems Vice-President to lead an organization design team, facilitated by McKinsey & Company, to create a process based design/build organization for equipment selection, standards, engineering, estimating, and construction of transmission lines and substations.

Superintendent, Substation

Work Planner, General Foreman

Overhead and Underground

January 1989 – January 1990 (1 year 1 month)

Manage work and projects, implemented work management processes. Directly supervised construction and restoration departments.

Distribution District Engineer

Commonwealth Edison Company

Public Company; 5001-10,000 employees; E&C; Utilities industry

January 1986 – January 1989 (3 years 1 month)
 Supervised design and engineering of local distributions systems.

Standards Engineer

Commonwealth Edison Company
 Public Company; 5001-10,000 employees; EXC; Utilities Industry
 January 1984 – April 1986 (2 years 4 months)
 Develop material standards and engineering specifications

Commercial Division Computer Coordinator

Commonwealth Edison Company
 Public Company; 5001-10,000 employees; EXC; Utilities Industry
 January 1985 – January 1985 (1 year 1 month)
 Coordinated information technology and information systems upgrades and changes for operating divisions and served as the primary interface with the corporate IT department.

Testing Engineer

Commonwealth Edison Company
 Public Company; 5001-10,000 employees; EXC; Utilities Industry
 January 1981 – January 1983 (2 years 1 month)
 Troubleshoot and commission substation, distribution, and transmission system equipment.

Michael Hervey's Publications

LIPA Takes a Journey on the Integration Bus
 Transmission and Distribution World Magazine | February 1, 2008
 Authors: Michael Hervey, Prodrag Vujovic
 Smartgrid data integration and standards

A Common Language

Power and Energy Magazine, IEEE | November 2010
 Authors: Michael Hervey, Prodrag Vujovic
 This article describes the experience and motivation that drove the specific solutions developed for LIPA's EIM and data management strategy. LIPA's EIM has at its core a common information model (CIM)-based enterprise semantic model (ESM), a customized software development life cycle (SDLC), process templates, and LIPA's IT technical architecture design. Data modeling and technical architecture... more

LIPA Advances To the Next Level

Transmission and Distribution World Magazine | March 2002
 Authors: Michael Hervey, Thomas Spatz, Charles Fijnvandraat
 Vegetation Management

Michael Hervey's Languages

• French

Michael Hervey's Skills & Expertise

Risk Management Project Management Negotiation Leadership Customer Service Business Strategy Asset Management
 Organizational Development Labor Relations Policy Analysis Smart Grid Energy Renewable Energy Energy Efficiency
 Power Generation Business Process Process Improvement Strategic Planning Nuclear Change Management

View All (23) Skills

Michael Hervey's Education

Hofstra University
 MBA
 2000 – 2002

Iowa State University
 BS, Electrical, Electronics and Communications Engineering
 1977 – 1981

Gestalt Institute, Cleveland Ohio Edison Electric Institute

Michael Hervey's Additional Information

Webbsites: • Personal Website
 • Company Website
 Interests: Sailing, Traveling, Electronics & Computers
 Groups and Associations: Energy & Utilities Network



Exelon Alumni Group



Navigant Consulting, Inc. Alumni Association



Transmission and Distribution Asset Management (TADAM)- Utilities



Utilities Center for Excellence

Contact Michael for:

- career opportunities
- getting back in touch
- reference requests

View Michael Hervey's full profile to...

- See who you and Michael Hervey know in common
- Get introduced to Michael Hervey
- Contact Michael Hervey directly

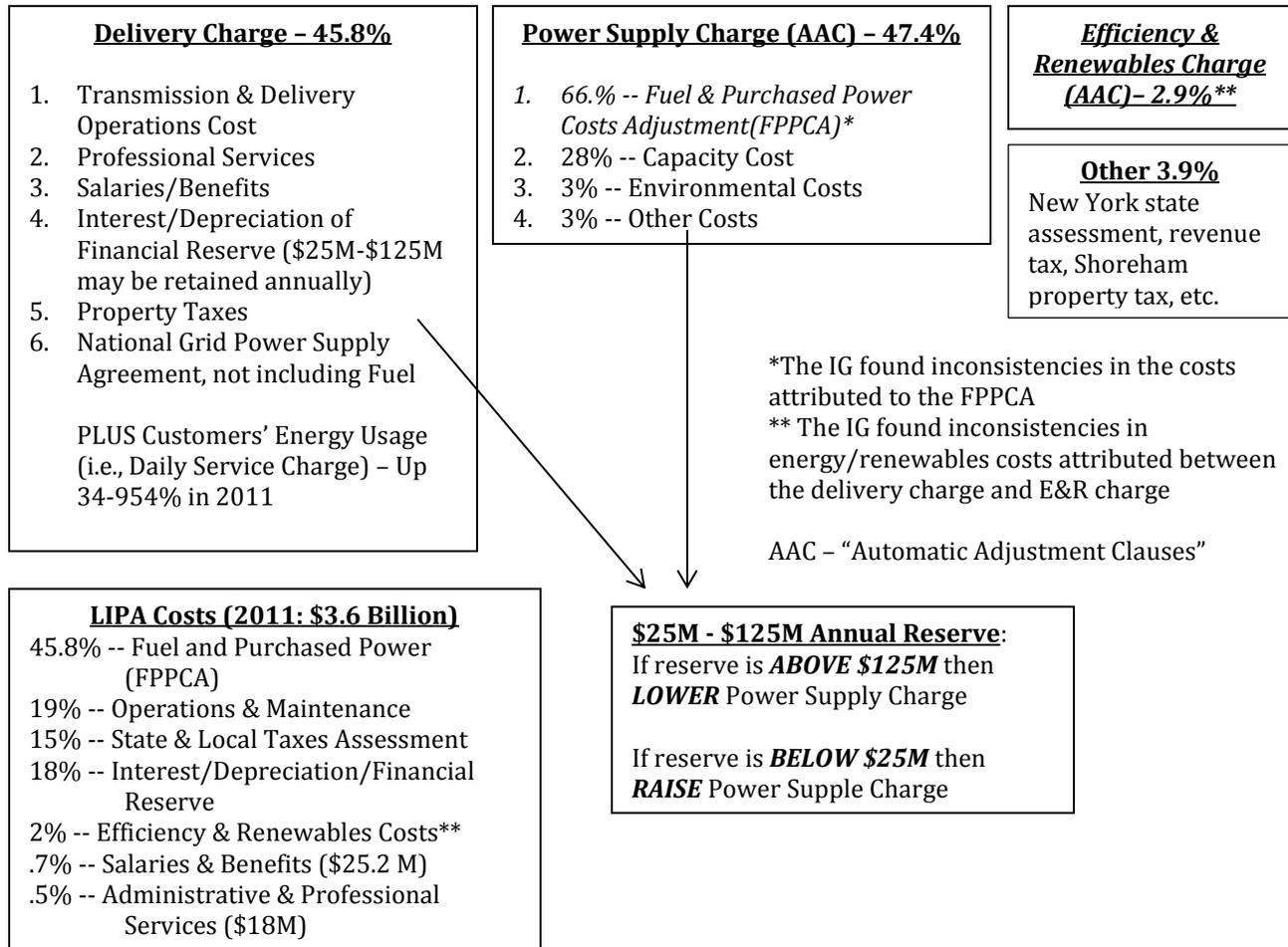
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8.8 COMPONENTS OF LIPA CUSTOMER BILLS – 2011 (1.9% INCREASE IN *ENTIRE* BILL)



8.9 MAR. 31, 2011 KPMG INDEPENDENT AUDITORS' REPORT³⁸⁶



KPMG LLP
Suite 200
1305 Walt Whitman Road
Melville, NY 11747-4302

Independent Auditors' Report

The Board of Trustees
Long Island Power Authority:

We have audited the balance sheets, statements of revenues, expenses, and changes in net assets, and statements of cash flows of the Long Island Power Authority (Authority), a component unit of the State of New York, as of and for the years then ended December 31, 2010 and 2009, which collectively comprise the Authority's basic financial statements. These financial statements are the responsibility of the Authority's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of December 31, 2010 and 2009, and the changes in its financial position and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

As described in note 4 to the financial statements, the Authority adopted the provisions of Governmental Accounting Standards Board (GASB) Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, as of January 1, 2009.

In accordance with *Government Auditing Standards*, we have also issued a report dated March 31, 2011, on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope and of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

KPMG LLP is a Delaware limited liability partnership
the U.S. member firm of KPMG International Cooperative
("KPMG International"), a Swiss entity.

³⁸⁶ Information gleaned from the Inspector General's investigation of LIPA.



The accompanying management's discussion and analysis listed in the accompanying table of contents is not a required part of the basic financial statements but is supplementary information required by U.S. generally accepted accounting principles. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

KPMG LLP

March 31, 2011

8.10 MAR. 31, 2010 REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS³⁸⁷



KPMG LLP
Suite 200
1305 Wat Whitman Road
Melville, NY 11747-4302

**Report on Internal Control over Financial Reporting and on Compliance
and Other Matters Based on an Audit of Financial Statements
Performed in Accordance with *Government Auditing Standards***

The Board of Trustees
Long Island Power Authority:

We have audited the basic financial statements of the Long Island Power Authority (Authority) as of and for the year ended December 31, 2010, and have issued our report thereon dated March 31, 2011. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control over Financial Reporting

In planning and performing our audit, we considered the Authority's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing an opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over financial reporting.

A deficiency in internal control over financial reporting exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's basic financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

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KPMG LLP is a Delaware limited liability partnership
the U.S. member firm of KPMG International Cooperative
("KPMG International"), a Swiss entity.

³⁸⁷ Information gleaned from the Inspector General's investigation of LIPA.



This report is intended solely for the information and use of Authority management, the Authority's Board of Trustees, the New York State Division of the Budget and the New York State Office of the State Comptroller and is not intended to be and should not be used by anyone other than those specified parties.

KPMG LLP

March 31, 2010

8.11 ACRONYMS

<i>Acronym</i>	<i>Definition</i>
AG	Attorney General
AARP	American Association of Retired Persons
CCSP	Corporate Coastal Storm Plan
CEO	Chief Executive Officer
COO	Chief Operating Officer
CPB	New York State Consumer Protection Bureau
CRT	Community Response Team
CUB	Citizens Utility Board
DEER	Database for Energy Efficiency Resources
DOS	Department of State
DOT	New York State Department of Transportation
DPS	New York State Department of Public Service
DRA	Division of Ratepayer Advocates
EEGA	Energy Efficiency Groupware Application
EI	Edison Electric Institute
EEP	Electric Emergency Plan
EEPS	Energy Efficiency Portfolio Standard
EOC	Emergency Operations Center
ETR	Estimated Restoration Time
FEMA	Federal Emergency Management Agency
GJGNY	Green Jobs Green New York
GSA	General Services Administration
IBEW	International Brotherhood of Electrical Workers
IG	Office of the New York State Inspector General
IOU	Investor Owned Utility
IT	Information Technology
kWh	Kilowatt hour(s)
L&U	Lost and Unaccounted Energy
LILCO	Long Island Lighting Company
LIPA	Long Island Power Authority
LSE	Life Saving Equipment
MSA	Management Services Agreement
Navigant	Navigant Consulting, Inc.
NG	National Grid
NYCDOB	New York City Department of Buildings
NYCOEM	New York City Office of Emergency Management
NYECC	New York Energy Consumer Council

<i>Acronym</i>	<i>Definition</i>
NYMAG	New York Mutual Assistance Group
NYPA	New York Power Authority
NYSEG	New York State Electric and Gas
NYSERDA	New York State Energy Research & Development Authority
O&R	Orange and Rockland Utilities
OEEE	Office of Energy Efficiency and Environment
OEM	Office of Emergency Management
OMS	Outage Management System
PACB	Public Authorities Control Board
PRG	Priority Restoration Group
PSC	New York State Public Service Commission
PSEG	Public Service Enterprise Group
PULP	Public Utility Law Project
RFP	Request for proposals
RG&E	Rochester Gas and Electric
RGGI	Regional Greenhouse Gas Initiative
RMAG	Regional Mutual Assistance Group
RPS	Renewable Portfolio Standard
SAPA	State Administrative Procedure Act
SBC	System Benefits Charge
SLOSH	Sea, Lake and Overland Surges from Hurricanes
SPTdb	Standard Program Tracking database
T&D	Transmission and Distribution
TRC	Total Resource Cost
TURN	The Utility Reform Network
UIU	Utility Intervention Unit
UWUA	Utility Workers Union of America, American Federation of Labor and Congress of Industrial Organizations

8.12 COMMISSION MEMBERS

Co-Chair Robert Abrams Former Attorney General of New York State

Robert Abrams' 28-year career in public life was marked by achievement, independence and integrity. He was elected to three terms in the New York State Assembly, three terms as Borough President of the Bronx and four terms as Attorney General of New York State. He joined Stroock in 1994 following 15 years of distinguished service as Attorney General of the State of New York. As Attorney General, Mr. Abrams received numerous awards and honors and earned national prominence rarely achieved by a state-level official. He was widely heralded as a champion and protector of consumer rights. He served as president of the National Association of Attorneys General and was selected by his colleagues to receive the coveted WYMAN AWARD as Outstanding Attorney General in the Nation. At its June 2005 meeting, the National Association of Attorneys General presented Bob with The Bellotti Award, given to a former attorney general who "has served NAAG and worked diligently to further its vision and mission and who exhibits outstanding leadership abilities and high moral character."

Mayor Bloomberg appointed Mr. Abrams in 2005 to serve on the New York City Charter Revision Commission. In 2006, New York Governor Elect Eliot Spitzer appointed Mr. Abrams to serve as Co-Chair of his Policy Advisory Committee on Governmental Reform for his Transition, and New York Attorney General Elect Andrew Cuomo appointed him Executive Chair of his Transition Committee. In 2008, New York Governor David Paterson appointed Mr. Abrams to serve on the Board of the United Nations Development Corporation. In 2010, New York's Chief Judge Jonathan Lippman appointed him to be a member of the Advisory Council for the Retired Attorney Pro Bono Program. In 2010, Attorney General elect Eric Schneiderman appointed Mr. Abrams to serve as Honorary Co-Chair of his transition committee.

In 2009 Governor David Patterson issued an Executive Order renaming the Justice Building in Albany as the Robert Abrams Building for Law and Justice.

Co-Chair Benjamin Lawsky Superintendent of the Department of Financial Services

Benjamin M. Lawsky is New York State's first Superintendent of Financial Services. As Superintendent, Lawsky is the supervisor of all insurance companies in New York, all New York State-chartered depository institutions and the majority of United States-based branches and agencies of foreign banking institutions. He also regulates all of New York State's mortgage brokers, mortgage bankers, check cashers, money transmitters, budget planners, and similar providers of financial services. Entities supervised by the Department number approximately 4400, with assets of about \$6.2 trillion.

Prior to his current position, Superintendent Lawsky was Governor Andrew Cuomo's Chief of Staff. Previously, he served as the Deputy Counselor and Special Assistant to then-Attorney General Cuomo. Prior to that, Mr. Lawsky had spent over five years as an Assistant United States Attorney in the Southern District of New York, where he prosecuted white collar crime, organized crime, and terrorism cases. He began his career as Chief Counsel to Senator Charles Schumer on the Senate Judiciary Committee and as a Trial Attorney in the Civil Division of the Department of Justice.

Peter Bradford
Former Chair of the Public Service Commission

Peter Bradford is one of the country's most experienced public utility regulators. He was chairman of the New York State Public Service Commission from 1987 to 1995. Mr. Bradford served as president of the National Association of Regulatory Utility Commissioners (NARUC) in 1987. He chaired the Maine Public Utilities Commission from 1982 until 1987, and had been Maine's Public Advocate in early 1982.

He also served as a member of the US Nuclear Regulatory Commission (NRC). During his term, the NRC undertook a major overhaul of its regulatory and enforcement processes in the wake of the Three Mile Island accident. Mr. Bradford currently teaches at Vermont Law School and consults on regulatory practices and procedures within the US and abroad. He is a graduate of Yale University and Yale Law School.

Tony Collins
President of Clarkson University

Tony Collins is a regional and national advocate for higher education - industrial partnerships that couple research discovery and engineering innovation with enterprise for commercialization and economic development with a focus on advancing sustainable energy solutions and environmental technology innovation. New York Governor Andrew Cuomo appointed Dr. Collins in July 2011 to serve as co-chair for the North Country Regional Economic Development Council. He is the also the president of the Seaway Private Equity Corporation that invests in new technology companies based in St. Lawrence County, New York, and serves on the board for (TSEC) The Solar Energy Consortium, which mobilizes related resources in New York State. He is a member of NYSERDA's Technology & Market Development Advisory Committee which provides technical and policy guidance to NYSERDA on energy and environmental research and market development initiatives.

President Collins is the immediate past chair of New York's Commission of Independent Colleges and Universities and the chair-elect of the National Association of Independent Technological Universities. In addition, he serves on the boards of the CenterState Corporation for Economic Opportunity, the NYS Business Council, and on the Syracuse Center of Excellence in Environment and Energy Systems.

Dr. Collins was among the primary architects of the Vision of a Clarkson Education that has guided evolution of the curriculum since 1995. As president, he now leads Clarkson's Evolution to Excellence, a comprehensive strategic plan elevating the University's academic reputation, strengthening its financial resources, and increasing the lifetime engagement of alumni and greater Clarkson community.

John Dyson
Former Chairman of the New York Power Authority

John S. Dyson became a trustee of the New York Power Authority (NYPA) in March 2011, after being nominated by Governor Andrew Cuomo and confirmed by the State Senate. He was elected vice chairman of the board by his fellow trustees in March 2012. Mr. Dyson is Chairman of Millbrook Capital Management, Inc., an investment firm whose activities include managing private equity investments and a stock investment fund. From 1997-2001, Mr. Dyson was the Chairman of New York City's Council of Economic Advisors. He was the Deputy Mayor for Economic Development and Finance in the administration of Mayor Giuliani from 1994 to 1996. Mr. Dyson served as the Chairman of the New York Power Authority from 1979 to 1985, where he enhanced the safety and economics of two nuclear power plants then owned and operated by the Authority. He was Commissioner of Commerce for New York State when the "I Love New York" advertising

campaign was created. In 1975, Governor Hugh Carey appointed him to Commissioner of Agriculture of New York State.

Rev. Floyd Flake

Senior Pastor of Greater Allen African Methodist Episcopal Cathedral

The Reverend Dr. Floyd H. Flake is the senior pastor of the more than 20,000 member Greater Allen A. M. E. Cathedral of New York in Jamaica, Queens, and President of Wilberforce University in Ohio. During his 31-year pastorate, Allen has become one of the nation's foremost Christian churches and development corporations. The church and its subsidiary corporations operate with an annual budget of over \$34 million. The church also owns expansive commercial and residential developments; a 750-student private school founded by Flake and his wife Elaine, and various commercial and social service enterprises, which has placed it among the nation's most productive religious and urban development institutions. The corporations, church administrative offices, school, and ministries comprise one of the Borough of Queens' largest private sector employers.

Flake served eleven years in the U.S. Congress, and was a member of the Banking and Finance, and The Small Business Committees. He established a reputation for bipartisan, innovative legislative initiatives to revitalize urban commercial and residential communities. Most notably, the Community Development Financial Institutions Act of 1993 contained provisions named the Bank Enterprise Act (BEA), authored by Representative Floyd Flake, which provided incentives for financial institutions to make market-oriented investments in destabilized urban and rural economies. These BEA provisions along with the Community Development Fund Initiative (CDFI) continue to yield millions of dollars' worth of direct and secondary investment for residential and commercial growth. It also provides needed Federal Insurance relief for banks, and increased private sector capital flow in communities with declining economic fortunes. The BEA has directly impacted the volume of residential mortgage and commercial lending in grossly under-invested locales.

Mark Green

Former New York City Public Advocate

Over the past 40 years Mark Green has been a public official, public interest lawyer, author, teacher, TV commentator, radio executive and, now, the host of a syndicated national radio show, Both Sides Now. Becoming a member of the Washington, D.C. Bar (and later the New York State Bar), he spent 10 years in the 1970s working with Ralph Nader, ultimately running Public Citizen's Congress Watch, the largest consumer lobbying group in D.C.

From 1990 to 1993, he served as Consumer Affairs Commissioner in the administration of Mayor David Dinkins. Mark left the Consumer Affairs Department in 1993 to successfully seek election as New York City's first Public Advocate. He served two terms as Public Advocate (1993-2001) and then was the Democratic nominee for Mayor in 2001. He was President of Air America Radio (2007-2009) and the editor and author of 22 books on public policy, including *Who Runs Congress?* and *The Monopoly Makers*.

Joanie Mahoney

Onondaga County Executive

Elected in November 2007, Joanne M. Mahoney is the first woman to serve as County Executive for Onondaga County. After spending time in private practice, County Executive Mahoney accepted a position with the Onondaga County District Attorney's Office where she worked for five years as a criminal prosecutor.

Interested and involved in politics for most of her life, Joanie worked on many campaigns throughout the years. In 1999, she became a candidate herself and was elected Councilor-at-Large in the City of Syracuse where she served a four year term.

County Executive Mahoney was instrumental in the passing of a new sales tax sharing agreement that benefits all county residents and increases transparency in government. She has also made it a priority to encourage local towns and villages to work together and share services where possible, in order to save money for the residents.

Under her watch not only has the County maintained its AAA bond rating, it has been upgraded from “Negative” to “Stable.” The County Executive has made literacy a priority creating a literacy fund that helped form the Imagination Library which provides free books to young children. Joanie has guided the County in a partnership with Say Yes to Education, which will help increase graduation rates and make college a possibility for many city students.

In 2012, Governor Cuomo appointed County Executive Mahoney to the New York Power Authority Board of Trustees.

Kathleen Rice
Nassau County District Attorney

Elected in 2005 and re-elected in 2009, Kathleen Rice is the first woman to serve as Nassau’s chief law enforcement officer. As district attorney, Kathleen has been a champion for progressive criminal justice policies, which have achieved impressive results and commanded national attention. Immediately after taking office in 2006, Kathleen took on the epidemic of drunk driving on Long Island. She’s helped to author and champion passage of legislation to enact tougher penalties on those who drink and drive with kids in the car and on those drunk drivers who injure other motorists on the road. She’s successfully prosecuted those who kill innocent victims on our roads with murder, and she’s dramatically reduced plea-bargaining for recidivist offenders. Kathleen’s efforts to combat drunk driving have been praised by Mothers Against Drunk Driving, profiled on CBS News’ 60 Minutes, and caused the New York Daily News to label her “the nation’s toughest prosecutor on DWI offenses.”

Dan Tishman
Vice Chairman at AECOM Technology Corporation, and Chairman and CEO of Tishman Construction Corporation

Daniel R. Tishman is Vice Chairman and a member of the Board of Directors for AECOM Technology Corp. (NYSE: ACM), an \$8-billion global provider of professional technical and management support services. Mr. Tishman is also Chief Executive Officer of Tishman Construction, one of the largest and most experienced builders in the world, which joined AECOM in July of 2010. The firm was founded in 1898 and has remained at the forefront of the industry under Mr. Tishman’s leadership. Tishman Construction provides construction and project management, owner’s representation, and other construction-related services to a diverse array of clients across the United States and throughout the world.

Mr. Tishman has worked in real estate development and construction for over 25 years and has been a major force behind the green building movement. Under his leadership, Tishman managed the construction of 4 Times Square, the first green skyscraper in New York City, and 7 World Trade Center, the first office tower in New York City to be certified under the Leadership in Energy and Environmental Design (LEED) rating system. Tishman Construction recently completed construction of the Bank of America Tower at One Bryant

Park, the first skyscraper in the world to be certified LEED Platinum, and the LEED Gold-certified CityCenter in Las Vegas, which is the largest and most sustainable mixed-use hotel, residential, retail and casino complex in the United States and is currently completing the reconstruction of the World Trade Center.

Regina Calcaterra
Executive Director

In January 2012, Suffolk County Executive Steve Bellone appointed Regina the first woman to serve as Chief Deputy County Executive. Upon taking office, the County Executive was faced with a budget deficit exceeding \$500 million dollars. With a substantially reduced management staff, Regina assisted the County Executive in addressing the county's fiscal challenges by workforce reduction, employee concessions, streamlining and restructuring government services, merging government agencies and working closely with the State Legislature and the Governor to identify and implement revenue generating initiatives to reduce the budget deficit. Under the direction of the County Executive, Regina also administers the day to day operations of a 9,600 employee workforce and oversees a \$2.7 billion budget that serves a population exceeding 1.6 million residents. Alongside the Suffolk County's emergency response leaders, Regina managed the emergency preparedness and storm response recovery for Superstorm Sandy's.

Regina served as partner to Barrack, Rodos & Bacine an internationally recognized corporate fraud litigation firm, representing US and European public employee pension funds in cases where those funds have been defrauded. Among cases on which she worked, Regina was part of the team that represented the New York State Common Retirement Fund in the lawsuits against WorldCom- litigation which led to a historic \$6.13 Billion recovery - and McKesson/HBOC which led to recovery of more than \$1 billion to injured investors. More recently, she was on the litigation team that recovered over \$500 million from Merrill Lynch resulting from their role in the mortgage crisis. Her early career included successfully advocating for public policy issues on the national, state and local levels regarding disabled veterans, all people with disabilities, accessible transportation, prevailing wage, municipal revenue generating initiatives and streamlining of government operations.