

MORELAND COMMISSION

ON UTILITY STORM PREPARATION AND RESPONSE



INTERIM REPORT

January 7, 2013

Co-Chairs

Robert Abrams

Benjamin Lawsky

Appointed by

Governor Andrew M. Cuomo

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STATE OF NEW YORK



Co-Chairs

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Moreland Commission
Appointed by
Governor Andrew M. Cuomo

Executive Director
Regina Calcaterra

January 7, 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 Lawskey, is pleased to present you with this Interim Report. This Interim Report presents a number of options for restructuring the Long Island Power Authority (LIPA), strengthening oversight of the State's utilities, bolstering existing enforcement mechanisms, and streamlining the State's energy agencies and authorities to reduce redundancies and inefficiencies. Although the investigatory process is ongoing, the Commission believes that its preliminary findings and recommendations may be useful during the upcoming 2013 State Legislative Session.

The Commission has conducted an investigation that solicits the experiences, opinions and views from a cross-section of interested parties and the public. We developed recommendations following a review of LIPA's storm preparation and recovery practices, and interviews of LIPA personnel, State agency and authority employees, mutual aid organizations and local government officials. We conducted three public hearings in Nassau, Suffolk and New York counties, and heard testimony from members of the public, industry experts, business owners, and representatives from critical infrastructure entities. We created a website to publicize the public hearings and provide the public with another medium to voice their opinions

and share their experiences. We took public sworn testimony from LIPA and National Grid leadership, which provided the Commission members and the public an opportunity to hear about those entities' storm preparation, emergency preparedness and ability to respond to their customers before, during and after Hurricane Sandy.

Due to the urgent need to address the dysfunctional delivery of power to the LIPA service area and the serious shortcomings in the PSC's authority over electric utilities, the Commission believes this Interim Report may be useful in the near-term.

While the Commission identified several options in the Interim Report regarding the future of LIPA, the Commission recommends privatization. Regardless of what choice is ultimately selected, it is likely that it will not be implemented before the end of 2013. Therefore, the Commission recommends implementation of a strong transition program to provide leadership and oversight until the ultimate solution is put in place.

Upon submission of the Interim Report, the Moreland Commission will embark upon the second phase of its assignment, investigating all New York utility power providers' response to the Recent Storms. The Commission anticipates following the same model of issuing subpoenas, demanding document production, and conducting witness interviews and public hearings as it used during the first phase of its investigation. Furthermore, the Commission's Policy Subcommittee will examine the challenges associated with managing the costs of storm hardening activities. The Commission will also take under advisement for further review in its final report, what changes, if any, should be made to the PSC regarding the qualifications, level of compensation and outside employment of the PSC's Commissioners. Additionally, it will review the potential need for a new ratepayers' advocacy entity.

We thank the dedicated Commission staff and those who contributed to the Commission's efforts to ensure New York is better prepared for and responsive to future disasters affecting power infrastructure in the State, and to provide for an adequate oversight for those entities entrusted with providing critical utility services to all New Yorkers.

Co-Chair Robert Abrams

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1 EXECUTIVE SUMMARY

On November 13, 2012, Governor Andrew M. Cuomo established a commission under the Moreland Act (Section 6 of the New York State Executive Law) (Moreland Commission or Commission) to study, examine, investigate, and review the response, preparation, and management of New York's power utility companies with respect to Hurricanes Irene and Sandy, Tropical Storm Lee, and 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 jurisdiction, responsibility, and mission of the State's energy agency and authority functions.¹ The Governor appointed ten commissioners, two of whom, Robert Abrams and Benjamin Lawskey, serve as co-chairs. The Commission subsequently formed two subcommittees: the Investigation Subcommittee, Chaired by Nassau County District Attorney Kathleen Rice, was assigned to investigate storm preparation and response of the power utility companies, and the Policy Subcommittee, chaired by Peter Bradford, former Chair of the New York State Public Service Commission (PSC), was tasked with review of utility and regulatory structures.

Due to the urgent need to address the dysfunctional delivery of power to the Long Island Power Authority (LIPA) service area and the serious shortcomings in the PSC's authority over electric utilities, the Commission determined it would be appropriate to issue this Interim Report. The findings and recommendations in the Interim Report are 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, media coverage and other publicly available materials. The Interim Report addresses certain issues which could be considered in the near-term.

This Interim Report presents preliminary findings and recommendations for consideration regarding:

- 1) The ineffective manner in which LIPA addresses emergency planning, preparedness, and storm response in its service area;
- 2) The inherent defects in the current LIPA-National Grid structure that may be avoided in the future through an alternative organizational structure under which the service provider for the existing LIPA service area and the owner of applicable utility assets are one entity;
- 3) New oversight and enforcement mechanisms that should be considered to permit the PSC to make utilities more accountable and responsive to regulators and customers; and
- 4) How redundant and/or overlapping energy programs that usurp resources from core mission energy agency objectives could be better streamlined, thus allowing resources to flow back to agency core missions.

The Interim Report provides sufficient evidence that LIPA's outsourcing of most of the day-to-day management and operations of its system to National Grid simply does not work. In short, the bifurcated LIPA-National Grid structure lends itself to mismanagement, a lack of appropriate investment in infrastructure, a lack of accountability to customers and excessive rates. The Commission recommends immediate consideration of a single unified structure that both owns the transmission and distribution assets

¹ 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]. Retrieved from <http://www.governor.ny.gov/press/11132012Section6> and appended hereto.

and is entirely responsible for serving LIPA's current service area. In this respect, the Commission has identified three options for consideration:

- 1) The disposition of LIPA's assets to a qualified Investor Owned Utility (IOU) that would serve as the sole utility manager and operator to the existing LIPA service area. This privatization would place the new service provider under the stronger regulatory environment recommended by the Commission, as opposed to remaining a self-regulated entity.
- 2) Full public ownership and operation by LIPA of the transmission and distribution system. This "public power" model would integrate all vital functions into one entity including management, operating and capital budgeting, infrastructure maintenance, hardening and upgrades and day-to-day electric service delivery.
- 3) Full public ownership and operation by the New York Power Authority of the LIPA electric system. In this alternative public power model, NYPA would assume direct responsibility for management and operation of LIPA's transmission and distribution system, with LIPA maintained as a separate subsidiary within NYPA.

The Commission acknowledges that all three options have their own benefits and risks that must be balanced against the best interest of the ratepayers in the existing LIPA service area. While the Commission identified several options, the Commission recommends privatization. Most importantly, any option must integrate all vital functions into a single entity, including management, operating and capital budgeting, infrastructure maintenance, hardening and upgrades and day-to-day electric service delivery. However, regardless of which option the Governor and Legislature pursue, it is likely that it will not be in place for a significant amount of time. Accordingly, the Commission respectfully recommends developing and implementing a transition program that addresses the need for stability, proper resources and strong management to ensure safe and reliable electric service during both normal conditions and weather emergencies.

Based upon a review of the Public Service Law, PSC rules and regulations, past PSC orders, and interviews with New York State Department of Public Service (DPS) personnel, the Commission finds both (i) the PSC does not adequately utilize its existing statutory authority to full effect; and (ii) its existing statutory enforcement authority is inadequate and should be strengthened and updated. Accordingly, the Commission recommends that statutory and other actions be made to put real regulatory and enforcement teeth into the PSC, which for far too long has been a toothless tiger. Specifically, the Commissioner recommends such actions include new oversight and enforcement mechanisms as necessary to ensure that utilities are held accountable and responsive to regulators and customers. The recommendations for consideration include:

- The PSC be statutorily authorized to levy administrative penalties against each utility for violations of PSC orders and regulations or upon a finding that such utility has failed to provide safe and adequate service under a "reasonable business" standard (comparable to the prudence standard). The size of the potential penalties should also be increased, and provisions should be adopted to ensure that the penalties are paid out of shareholder capital and not passed on to ratepayers.
- The PSC be authorized to issue an order that directs a utility to comply with recommendations made pursuant to management and operations audits.
- The PSC recommence operational audits at least every five years as currently required under the Public Service Law.

- To implement the strengthened auditing functions of the PSC, consideration should be given to having a dedicated auditing unit to help ensure that the PSC is well-situated to fully exercise its statutory authority and perform both management and operational audits.
- Consideration should also be given to creating a dedicated unit for investigating and enforcing utility compliance with PSC orders and recommendations and with utility tariffs.
- Statutory changes should be considered to explicitly authorize the PSC to formally review the performance of each of the IOUs to provide safe and adequate service in relation to their maintaining a Certificate of Public Convenience and Necessity. To ensure compliance with the recommendations put forth by the PSC after a review, the Commission also recommends the clear establishment of the PSC's authority to revoke the Certificate of Public Convenience and Necessity.
- DPS staffing and budgetary levels should be reviewed to ensure they are sufficient to carry out the newly-designed core functions of the PSC, and procedures should be reviewed to ensure cross-training of the existing workforce, implementation of performance management standards and technology upgrades. Given the substantial retirements at DPS in recent years, the agency currently is not staffed to the level authorized in the FY 2012-13 budget of 524 full-time employees (FTE). Based upon the additional mandates that the Commission recommends, the PSC should hire up to the 524 FTE allotment to assist in implementation and enforcement of the new mandates. Furthermore, the 524 FTE level should be considered for reauthorization in the upcoming FY 2013-14 Executive Budget and thereafter.
- Similar to Sarbanes Oxley where CEO's need to certify the validity of their financial statements, consideration should be given to requiring senior officers of each utility to annually certify to the PSC that the utility is acting in compliance with all applicable State laws, rules, regulations, orders, and procedures, including the statutory requirement to provide safe and adequate service.
- Consideration should be made to ensure that appointees to the PSC have demonstrated competence in some aspect of utility regulation as well as a concern for the public well-being.

The Commission has also determined that there are redundant and/or overlapping State energy programs that have contributed to DPS staff (that serves the PSC) deviating from its core mission of regulating utilities for the safety and security of all New Yorkers. One example of this redundancy and deviation is the overlap between DPS and New York State Energy Research and Development Authority (NYSERDA) programs. Thus, the Commission recommends the consideration of a unified policy making process that provides coordinated policy direction and implementation, eliminates redundancy, and ensures an efficient and coordinated State energy policy administration.

Upon submission of the Interim Report, the Moreland Commission will begin the second phase of its directive: Investigating all utilities' responses to the Recent Storms. The Commission anticipates mirroring the same model of issuing subpoenas, document production, witness interviews and public hearings as applied for the first phase of its efforts. Furthermore, the Commission's Policy Subcommittee will examine the challenges associated with managing the costs of storm hardening activities.

The Commission will work towards providing its final report by Spring 2013, and hope this Interim Report will prove useful to the Governor and the Legislature in the near-term.

2 BACKGROUND

Hurricane Sandy became a Category 1 hurricane on October 24, 2012 and strengthened to a Category 2 hurricane at its peak intensity. As Sandy made its way northeast off the Atlantic coastline, the enormous size of the storm – nearly 2,000 miles across – was evident. Sandy took an unusual curve to the northwest due to a high pressure blocking system before its center made landfall in New Jersey. In New York, the National Weather Service issued high wind watches statewide and flood watches along the Atlantic Ocean and Hudson River Valley. On October 26, 2012, because of the storm’s large size and expected impact, Governor Cuomo declared a state of emergency for all of the State’s 62 counties in preparation for the potential impact of Hurricane Sandy. He also requested and received a pre-landfall disaster declaration from President Obama. Exacerbating flooding potentials, the timing of the storm coincided with high tide during a full moon cycle, resulting in storm surge predictions of as much as 11 feet. As a precautionary measure in response to the potential flooding, sections of New York City and Long Island were evacuated, commuter rail, subway, and bus services were suspended, some tunnels were closed, and utilities turned off services in some low-lying areas to minimize damage. High winds also resulted in bridge closures and flight cancellations at airports, including JFK and LaGuardia, prior to the storm’s arrival.

As the storm intensified the night of Monday, October 29th, the storm surge devastated sections of lower Manhattan, Staten Island, Brooklyn and Queens, as well as the North and South shores of Long Island and its barrier island, Fire Island. Extensive flooding occurred within residential areas, roadway and subway tunnels. Because of the flooding and wind damage, President Obama declared parts of New York Major Disaster Areas on October 30th. At the storm’s peak, electric service to 2.1 million New York customers was lost; 951,000 of those were served by Long Island Power Authority. Consolidated Edison had 825,000 customer outages, including approximately 230,000 outages in Manhattan when supply was lost to several of its networks. In utility parlance, a “customer” represents a business or a residence which may have several people residing in it; so for Hurricane Sandy the actual number of people affected by the loss of power was likely 2 to 3 times the number of customers. The loss of power had a major impact on the provision of healthcare, telecommunications services, subway and rail services, and potable water and sewage treatment. The extended duration of the outages also severely impacted port operations and distribution of gasoline and diesel fuel. Flooded areas also experienced the loss of natural gas services, where both low and high pressure lines were compromised. On November 7, 2012, a Nor’easter affected lower New York, resulting in the interruption or re-interruption of electric service to approximately 185,000 electric customers. Full electric restoration in the service territories encompassing the lower portion of New York State, where the most damage from Sandy occurred, ranged from between 10 and 21 days (depending on the utility) for customers that could safely receive service.²

Hurricane Irene took a more traditional path as it made its way up the East Coast and across Eastern New York and New England. On Sunday, August 29, 2011, the center of the storm was downgraded to a tropical storm at the point at which it passed over New York City. Nevertheless, the storm produced 6 to 14 inches of rain in some parts of the State. The significant rainfall resulted in flash flooding conditions and caused 14 rivers to rise to devastating flood levels. The flash flooding and high winds, particularly on the back side of the storm, resulted in major damage to homes, roadways and bridges, as well as electric and telecommunications infrastructure. Rainfall from Tropical Storm Lee, which hit less than two weeks later, caused record flooding along the Susquehanna and Chenango Rivers. In response to the damage caused by Irene and Lee, the Governor declared a state of emergency in 38 of the State’s 62 counties. The sum of the electric utilities’ peak outages from these two storms was 1.2 million customers, nearly all experienced

² This excludes those customers of properties that suffered substantial damage during the storm, and thus where electricity in most instances is still unavailable.

during Irene. Although the applicable utilities restored electricity to 90% of customers by Friday, September 2, restoration of electric service took over a week in some areas. Nearly 13,000 gas customers were also affected during these storms, with the majority related to the flooding caused by Lee.

On December 11, 2008, an ice storm impacted the eastern region of upstate New York and parts of New England. While not as widespread as the aforementioned storms, the severe icing, over 1 inch in places, stressed and damaged trees and power lines causing approximately 330,000 customer outages. The duration of the storm, approximately 30 hours of freezing rain, followed by high winds, impeded service restoration efforts, which took eight days for some customers.

PRELIMINARY INVESTIGATIVE FINDINGS AND RECOMMENDATIONS

3 THE COMMISSION'S INVESTIGATION TO DATE

In the course of its investigation, the Commission conducted research and collected data and other evidence relating to power company responses before, during and after Hurricane Sandy, Hurricane Irene, Tropical Storm Lee and other recent storms, which inflicted serious weather-related damage to this State. In the month and a half since the initiation of its investigation, the Commission issued subpoenas to 7 utilities and sent 40 letters seeking documents and information relating to the investigation. In response to these requests, the Commission has received thousands of pages of documents. To date, over 20 witnesses have been interviewed by the Commission – 2 from the State Office of Emergency Management, 5 from Nassau and Suffolk County governments, 4 from the New York Power Authority (NYPA), 3 from NYSERDA, 3 from the DPS, 4 from National Grid and 2 from LIPA. In addition, the Commission has held three public hearings at which testimony was received from the public and from representatives of LIPA and National Grid. The Commission also included in its deliberations a review of the comments offered by the public, elected officials and others impacted by the devastation of the most recent event, Hurricane Sandy. All of this information has informed the Commission's views and provided the foundation for the preliminary recommendations set forth in this Interim Report.

The remainder of this Interim Report outlines the preliminary findings of the Commission and recommendations for actions the Commission believes are appropriate to address the problems identified to date. Specifically, recommendations are offered relating to:

- The need to realign the provision of electric service to customers on Long Island and the Rockaway Peninsula (in Queens) who are presently being served by LIPA and National Grid;
- Improving the oversight and regulation of New York utilities; and
- Improving New York utilities' preparation for and response to future weather emergencies.

4 LIPA INVESTIGATION

An initial component of the Commission's charter, which was tasked to the Investigation Subcommittee, was the analysis of LIPA. To that end, the Investigation Subcommittee formed and followed the following analytical template:

- *Legal & Organizational Framework Analysis* – The analysis of the legal and organizational structure focuses on LIPA’s enabling statute, bylaws, and contracts. A foundational understanding of LIPA’s framework as an entity is necessary to assess its optimal capabilities as a presumptively functional organization. A secondary aspect of this analysis is the identification of any obvious defects in LIPA’s organizational structure or constitution (e.g. large outstanding debt, prior or existing civil or criminal sanctions, bankruptcy, prolonged closure or unavailability of a significant capital asset). A tertiary aspect of this analysis is the identification of any oversight and the manner and quality of the oversight provided (e.g., financial oversight/approval for capital projects, stock issuance, or bonding, power to select managerial or administrative personnel, responsibility to issue operational audits).
- *Executive Decision-making Analysis* – The analysis of LIPA and National Grid’s relevant workforce, in connection with this investigative stage, including interviews of those personnel in LIPA and NG that were responsible for the tactical planning and practical execution of storm recovery plans.

In addition to the interviews and analysis of the executive-level personnel, interviews were conducted on a sampling of mid-level LIPA and NG personnel and outside-organization personnel that were imbedded with LIPA/NG staff in the aftermath of the various storm events. It was necessary to determine whether the organizational structure and presumptive capability referenced above was in practical effect. While there was specific emphasis on post-storm event operations, the interviews were broad enough to catalogue the day-to-day organizational culture of each entity (i.e., whether each individual was fully aware of his or her job responsibilities and whether each individual was fully aware of his or her direct supervisory chain of command).

- *Assessment of Capabilities* – Concurrently with the analysis of the organizational, legal, and human resource framework,³ the Subcommittee assessed the practical condition of each entity. In short, the Subcommittee endeavored to conclude whether LIPA and/or NG were “living up” to their potential, and, if not, the subcommittee sought to identify the various obstructionist elements.
- *Assessment of Warnings* – The subcommittee also worked to identify and assess the warning signs, recommendations, and mandates issued to LIPA/NG. In connection with this phase of the investigation, the subcommittee assessed whether the organization’s capabilities or lack of capability permitted it or prohibited it from following ameliorative recommendations, in the event such recommendations were in fact made. The goal of this investigative component was to distinguish between two separate potential issues, with equally serious ramifications: (a) the entity was unable to comport with a mandate/recommendation, or (b) the entity ignored a mandate/recommendation.

While the investigation into this matter is ongoing, the preliminary findings of the Investigation Subcommittee are produced in this Interim Report.

4.1 BACKGROUND

4.1.1 LIPA’S LEGAL FRAMEWORK

LIPA was formed under Public Authorities Law § 1020 (L.1986, c.517) (The LIPA Act). The stated legislative intent to form LIPA was provided in the enabling statute, which detailed the following catalysts:

- Constantly escalating and excessive costs of electricity in the counties of Suffolk and Nassau and that portion of the county of Queens served by the Long Island Lighting Company (LILCO), which posed a

³ Commentary in this regard is therefore imbedded in each respective section.

“serious threat” to the economic well-being, health and safety of the residents of and the commerce and industry in that service territory.

- The “lack of confidence” that electricity could be supplied in a “reliable, efficient and economic manner” by LILCO.
- The fear that excessive costs and lack of confidence deterred commerce and industry from locating on Long Island and caused existing commerce and industry to seriously contemplate relocating.
- The “imprudent” decision by LILCO to commence and continue construction of the Shoreham nuclear power plant, which created significant rate increases, thereby “straining the economic capabilities” of the ratepayers in the service area.
- The uncertainty as to whether the Shoreham nuclear plant would ever go into commercial service, and as to its reliability to the ratepayers.
- The uncertainty as to the economic viability of LILCO in general.

For all the above reasons, the State legislature determined that the optimal solution was a publicly-owned power authority.

LIPA was constituted to have fifteen trustees serving as the governing body – nine trustees to be appointed by the governor (including a chairperson), three to be appointed by the senate *pro tempore*, and three to be appointed by the speaker of the assembly. The trustees, in turn, were vested with authority to hire an executive staff, to enter into contracts with third parties, to issue bonds, to sell assets, to purchase wholesale power, to fix service rates, and, most notably for instant purposes, to “enter into management agreements for the operation of all or any of the property or facilities owned.”⁴

While the LIPA Act exempted LIPA from PSC oversight, it subjected LIPA’s procurement of contracts to requirements of the State Finance Law, and its operations and accounts to supervision of the New York State Comptroller.⁵ Additionally, LIPA is required to secure approval from the Public Authorities Control Board (PACB)⁶ prior to taking any action that would cause the issuance of bonds, significantly modify the use of an asset valued at more than one million dollars, or commit to a non-routine agreement or contract valued over one million dollars.

4.1.2 LIPA’S CORPORATE FRAMEWORK

“Our mission is to provide highly reliable and economical electric service to our more than 1.1 million customers in Nassau and Suffolk counties and the Rockaway Peninsula in Queens through our valued workforce with a commitment to superior service, accountability and transparency in all of our operations, while being recognized as a leader in the advancement of efficiency and renewable energy.” – LIPA Mission Statement

LIPA maintains a corporate headquarters at 333 Earle Ovington Boulevard, Suite 403, in Uniondale, New York. Pursuant to the LIPA Bylaws, the Board of Trustees must elect a President and Executive Officer, a Chief Financial Officer, a General Counsel, and a Chief Operating Officer. The President and Executive Officer, after

⁴ NY Pub. Auth. L. § 1020-f(s).

⁵ *Id.* at §§ 1020-w; 1020-cc.

⁶ *Id.* at § 1020-f(aa).

Board election, must be confirmed by the New York State Senate. Upon confirmation, the President and Executive Officer must appoint a Secretary and a Controller, and may appoint any other officers that he or she deems appropriate.⁷ The LIPA Board is also authorized to hire such other employees and consultants as may be required to perform the duties of the authority.⁸ An analysis of LIPA's corporate roster shows that there are 112 employment positions at LIPA, not all of which are presently filled. LIPA is broken up into several departments, which are staffed as follows:

<i>Department</i>	<i>Number of Positions</i>
President's Office	6
Finance	25
Operations	6
Environmental Affairs	16
General Counsel	11
Customer Service	12
Power Markets	14
Communications	4
Administration	11
Legislative Affairs	1
Community & Governmental Affairs	6

4.2 LIPA'S OPERATIONAL FRAMEWORK (2006 – 2013)

LIPA purchased LILCO's transmission and distribution (T&D) system in 1998.⁹ In preparation for the acquisition of these capital assets, and in order to secure a power supply, LIPA entered into an eight-year Management Services Agreement (MSA) with LILCO, dated June 26, 1997, and an Energy Management Agreement (EMA) with LILCO, dated June 17, 1997. On March 29, 2002, LILCO assigned the MSA to Keyspan Electric Services LLC (KSE) and the EMA to Keyspan Energy Trading Services LLC. On January 1, 2006, LIPA and KSE extended the MSA for a further eight years, and produced an "Amended and Restated MSA" as directly agreed-to between the parties. On March 23, 2007, KSE merged with National Grid US8, Inc., a wholly-owned subsidiary of National Grid, with KSE being the surviving entity. Under the terms of the merger, the "Amended and Restated MSA" would survive as between LIPA and KSE, subject to a handful of amendments. On May 1, 2008, KSE formally changed its name to "National Grid." Therefore, the existing

⁷ Bylaws of the Long Island Power Authority, Art. IV, § 2.

⁸ NY Pub. Auth. L. § 1020-e.

⁹ The transmission system consists of equipment necessary to bring power onto the island from an original power supply (high-load power lines, towers, substations); the distribution system consists of equipment necessary to provide power to the individual customer (poles, power wires, transformers, meters). The T&D system does not include power generation apparatus.

management contract between LIPA, as asset owner, and NG, as asset manager, consists of the January 1, 2006 MSA with March 23, 2007 Amendments. This contract will expire between the parties on December 31, 2013.

4.2.1 RESPONSIBILITIES OF NATIONAL GRID AS LIPA SYSTEM MANAGER

The MSA between LIPA and NG covers all aspects of their relationship, including the handling of hazardous waste, arbitration of disputes, and non-discrimination policies. For purposes of the present analysis, however, this report focuses on those components of the MSA which directly relate to the operation of the T&D system. In order to understand the nature of the relationship between LIPA and NG under “grey sky” conditions – i.e. storm preparation and response – it is first necessary to view the relationship under “blue sky” conditions.

NG has three main functions under the MSA: (1) operation and maintenance of the T&D system;¹⁰ (2) repair of the T&D system;¹¹ and (3) provision of customer service.¹² NG is responsible for providing all staffing necessary to adequately perform these three functions. To that end, NG employs approximately 2,000 employees on Long Island.

Operation and Maintenance

Section 4.2(B)(1): The Manager will be responsible for all electric transmission, distribution, and load serving activities for the safe and reliable operation and maintenance of the T&D System, management and/or performance of construction of improvements thereto and delivery of Power and Energy to LIPA’s customers....

Some specifically-enumerated duties of NG, as manager, with regard to the operation and maintenance of the system include: (1) system performance reliability; (2) customer-needs assessment; (3) materials and services procurement; (4) emergency preparedness and planning; (5) preparation of a capital plan and budget; (6) assessment of the need for capital additions to the T&D network; (7) procurement of goods and services from third parties; and (8) provision of emergency training to both NG and LIPA personnel.¹³

Repair

Section 4.3(A): The Manager shall maintain the T&D System, the T&D System Site and the Common Facilities in good working order and repair and in a neat and orderly condition...and shall conduct periodic, corrective, and preventive [sic] maintenance and repair of the T&D system consistent with the Contract Standards for the purpose of, among other things, mitigating and preventing abnormal wear, tear, and usage.

... “Maintenance” means those routine and/or repetitive activities required or reasonably recommended by the equipment or facility manufacturer, by LIPA or by the Manager, or customary in the industry to provide for the normal useful life of property, plant, equipment or other capital items.

¹⁰ MSA § 4.2.

¹¹ MSA § 4.3.

¹² MSA § 4.9.

¹³ MSA § 4.2(B)(1).

... “Repair” means those non-routine/non-repetitive activities required for operational continuity, safety and performance generally due to failure or to avert a failure of the T&D system or any of its components.

It is specifically noted in the MSA that any additions to the T&D system “shall be property of LIPA.”

Provision of Customer Service

Section 4.9(A): The Manager shall perform normal and customary customer services, including, but not limited to: Customer account service and maintenance; service restorations account inquiry work; customer assistance, credit and collection services; cashiering; account connection and disconnection; and conservation advice.

In connection with the above provision, NG is required to maintain customer service offices, a toll-free customer service number, and a toll-free emergency telephone number that is staffed 24/7.¹⁴ Accordingly, NG maintains a customer service center in Melville, New York, staffed by approximately 300 NG employees. Calls placed to the numbers posted on inserts, on bills, and on the LIPA website (lipower.org) are received at this call center.

4.2.2 COMPENSATION OF NATIONAL GRID AS LIPA SYSTEM MANAGER

In consideration for the above services, NG is paid a flat fee (the “Minimum Compensation”) plus a variable fee based upon power actually distributed during a contract year (the “Variable Compensation”).¹⁵ At the commencement of the MSA, NG’s minimum compensation was \$224,000,000 per contract year. On the fourth contract year, this amount would be multiplied by 1.017, and then multiplied again by the preceding twelve-month change in the Consumer Price Index for the New York-Northern New Jersey-Long Island region, with the resultant number being the new minimum compensation amount.¹⁶ Each successive contract year after the fourth would then follow this matrix.

NG can be assessed “performance penalties” for its failure to adhere to and/or attain certain “performance metrics” that were written into the MSA.¹⁷ There are a total of 18 performance metrics, governing activities that range from “billing accuracy” to “planned substation maintenance.” It is important to note, however, that in no event can the total financial penalty to NG cause it to receive less than its “minimum compensation” amount. Additionally, in the event that the performance penalties did hit or exceed this base limit, the hypothetical excess cannot be carried over to the next contract year.

4.2.3 RESPONSIBILITIES OF LIPA AS SYSTEM OWNER

As owner of the T&D system, LIPA retains various core, non-operative functions, including: (1) the setting of rates and charges in connection with its T&D system; (2) the development of “long-range strategic plans for the T&D system and T&D power supply;” (3) the determination of energy efficiency and conservation policy; (4) the formulation of a budget and raising of finances for capital improvements; and (5) legal compliance. For purposes of the instant review, however, this report focuses only on those oversight functions which relate to the proper operation of the T&D system.

¹⁴ MSA § 4.9(E), (H).

¹⁵ Manager Compensation is detailed in Section 6.1 of the MSA, and is subject to performance metrics contained in Section 4.4.

¹⁶ As compiled by the US Department of Labor Bureau of Labor Statistics.

¹⁷ MSA § 4.4(A); *see also* MSA Appendix 5.

While NG assumed responsibility for “day-to-day operations,” as detailed above, LIPA specifically retained the ultimate authority and control over the operations of the T&D system, including the right “to direct the Manager” in connection with the Manager’s obligations under the MSA.¹⁸ All customer communications (including the formatting of ratepayer bills) and government relations policy is overseen by LIPA, as are procurement procedures and third-party contracts.¹⁹ In the event of an emergency, LIPA even retains the right to “take possession of and use any or all” of NG’s staff and resources and directly manage them.²⁰

Financially, LIPA is responsible for the above-referenced contract payments to NG. However, it is further responsible for any “pass-through expenditures” incurred by NG. These expenditures range from the legal (claims, lawsuits, liens, etc. exceeding \$25,000) and the technical (increases in the annual cost of LIRR easements) to the mundane (LIPA’s return postage) and the obvious (capital improvements to LIPA assets). However, one category of pass-through expenditure of particular importance is that incurred by NG during a “storm event.” “Storm events” are events where at least 150 outage jobs are logged within a 24-hour period or at least 15,400 customers are interrupted.²¹

MSA Appendix 11: All costs incurred by the Manager as a result of responding to and restoring the T&D System to a “system normal” status after a Storm Event, as well as any immediate follow-up work performed in the five-day period commencing from the return to “system normal” status shall be paid to National Grid in addition to the Total Manager Compensation.

The MSA further requires LIPA to establish and maintain a “storm reserve,” which is a fund that must contain a balance of \$15,000,000 at the beginning of each Contract Year.

4.3 ANALYSIS OF LEGAL & ORGANIZATIONAL FRAMEWORK

4.3.1 ENTITY CONFUSION

The Commission has determined that the unique relationship between LIPA and NG leads to public confusion about the provision of customer and operational service. This issue is best evinced by a quote from a DPS report on LIPA in the aftermath of Hurricane Irene:

[I]n making recommendations, this report attempts, where possible, to describe those actions which should be undertaken by LIPA and those that would be expected to be implemented by NG. In certain instances, however, it may be unclear which entity should be appropriately referenced. In such cases, reference will not be made to either entity and, ultimately, in the course of implementing the report’s recommendations, it will be incumbent upon LIPA to either assume the primary responsibility or assign it to NG.²²

The import of this statement is that DPS,²³ after conducting an inquiry into LIPA’s response to Hurricane Irene in 2011 (that culminated in a 109 page report), remained “unclear” on which entity would be or should be responsible for implementing recommendations made in the report. This confusion seemingly relates

¹⁸ MSA § 4.5(A). LIPA may also conduct financial and performance audits of NG. MSA § 4.5(D), (E).

¹⁹ MSA § 4.5(A)(f), (l), (n).

²⁰ MSA § 7.9.

²¹ MSA, Appendix 11.

²² *In the Matter of the Review of Long Island Power Authority’s Preparedness and Response to Hurricane Irene: Case 12-E-0283*, New York State Department of Public Service (June 2012), at 2.

²³ In collaboration with Vantage Energy Consulting LLC.

directly to the provisions of the MSA which, on the one hand, delegate the entirety of operations to NG, while, on the other hand, vests strong operational oversight and approval powers to LIPA.

The MSA also includes a section on “Naming Guidelines,” which further creates confusion with respect to the entity actually having day-to-day responsibilities of the LIPA system. Here are some of the key provisions:²⁴

- “All media communication pertaining to LIPA’s electric business will be handled by LIPA’s Office of Communications. Any [National Grid] employee quoted in support of any such media inquiry will portray himself or herself as a LIPA representative, and will make no mention of [National Grid], other than as approved by LIPA.”
- “LIPA, as the entity responsible for providing an adequate and reliable supply of electricity to the Long Island Control Area, shall solely be responsible for discussion related to meeting that responsibility....[National Grid] shall not discuss matters related to the adequacy of the electricity resources needed to meet customer demand either within LIPA’s service area or within the entire Long Island Control Area.”
- “Any and all public events, including speaking engagements, involving solely LIPA’s electric business, will be identified as LIPA events, without any reference to [National Grid]. Accordingly, [National Grid] employees representing LIPA will portray themselves as acting on behalf of LIPA, with no reference to [National Grid].”
- “Banners, displays, collateral material, slide presentations, etc., will contain LIPA-approved logos and will not contain any references to [National Grid].”
- “Any oral communications with LIPA’s electric Customers will be portrayed as LIPA communications. Accordingly, any [National Grid] employee representing LIPA on electric business matters will indicate that he or she is a LIPA representative.”
- “All written correspondence with LIPA’s electric customers will be reproduced on LIPA letterhead, without any references to [National Grid], and signatures on such correspondence will reflect the author’s title and that the author is a representative of LIPA, without any reference to [National Grid].”
- “Business cards used for external purposes by [National Grid] employees and/or subcontractors representing LIPA on matters solely related to LIPA’s electric business, will utilize LIPA’s logo, without any references to [National Grid].”
- “Uniforms, hardhats, and foul weather gear worn by [National Grid] employees representing solely LIPA’s electric business, will contain LIPA’s logo, without any reference to [National Grid].”
- “LIPA-dedicated vehicles and equipment will contain LIPA logos...without any reference to [National Grid].”²⁵

In short, it appears that LIPA has made every effort to strongly retain brand identity with the public. The Commission finds, however, that LIPA’s retention of brand identity, while outsourcing the management and

²⁴ Brackets are included because the original MSA makes reference to “Keyspan,” which was the party to the MSA that later merged into National Grid and assigned the contract.

²⁵ MSA, Appendix 13.

operations of the system, is simply unworkable in the context of a storm event. As noted below, the bifurcated LIPA-Nation Grid structure has other inherent problems in the context of a storm event.

4.3.2 CAPITAL IMPROVEMENTS & STORM HARDENING

As noted above, LIPA owns the T&D system on Long Island. As asset owner, it alone has the predominant interest in asset protection. Asset protection, in turn, requires either maintenance to prevent premature depreciation of an asset (i.e. preventative maintenance) or capital improvement to address a resource variable. In this specific instance, the two types of variables experienced by LIPA's T&D assets are man-made disasters (e.g. acts of terrorism, accidents involving T&D structures) or natural disasters (e.g. flooding, high winds, snow). The commonality between these two variables is that they require disaster-preparedness and emergency planning.

While LIPA has "contracted-out" the emergency planning function to NG subject to certain LIPA approvals,²⁶ it retains strict control over capital improvements to its system. In 2006, Navigant Consulting completed a study that identified projects and programs to improve system performance and minimize the damage caused by severe storms. When LIPA and NG executives were questioned during the Commission's December 20, 2012 public hearing if NG was aware of the report, NG executives either stated that they were completely unaware of the report or that they heard about it but never received a copy. The NG executive who did hear about it also admitted never asking for it. Although LIPA publically adopted the concept of a storm hardening program and committed to spending \$25 million per year for this purpose, it failed to budget and make the stated level of capital improvements. The DPS report following Hurricane Irene found that LIPA averaged spending \$12.5 million per year on storm hardening between 2006 and 2010, well short of the anticipated capital spending level.

As discussed above, NG is financially responsible for generic repairs with the important exception being repair work in connection with a "storm event," or an event resulting in at least 150 outage jobs logged within a 24-hour period or the disruption of electric service to at least 15,400 customers. To put this number in prospective, the LIPA service territory has over 1,000,000 customers ("customer" is calculated by the number of power meters, not people). Therefore, in drawing those figures together, a simultaneous outage of a mere 1.5% of the total service territory will shift the financial burden of repair from NG to LIPA.

Under the MSA, NG is required, during the "event of a storm or other adverse operational condition," to "provide or cause to be provided field support, logistics support and mutual aid services from its other business units to support LIPA as if LIPA were an Affiliate of National Grid and, if necessary, shall cause its Affiliates to provide field support, logistics support and mutual aid services to LIPA."²⁷ The MSA further requires NG "to provide or cause to be provided customer service support to LIPA as if LIPA were an Affiliate of National Grid and, if necessary, shall cause its Affiliates to provide customer service support to LIPA."²⁸ However, it should be noted that these "pledges of aid" to LIPA during a storm event are not pledges of finance – LIPA will be billed by invoice for any operational costs incurred by an additional labor force.

Close examination of the MSA also reveals the lack of an incentive regarding NG's performance in the context of a storm event in particular – a "storm event" is specifically enumerated in the MSA as a "force majeure" event.²⁹ During a "force majeure" event, NG "shall be relieved of its obligation to comply with a Performance Metric, and such non-compliance shall not constitute an Event of Default, to the extent and for any period

²⁶ See MSA, §§ 4.2(B)(1)(c) and 4.2(B)(5).

²⁷ MSA, § 4.6(D).

²⁸ MSA, § 4.9(K).

²⁹ MSA, Appendix 1.

during which the operation of the T&D system is affected [by the event].”³⁰ Therefore, not only are performance penalties suspended, but NG’s overall recovery performance, or lack of performance, cannot lead to a breach of contract.

Apart from operating without chance of performance penalty, contract breach, or regard for expenses incurred, NG is also further insulated by a special clause in section 7.9 of the MSA, which reads as follows:

“Should the Manager, due to a Force Majeure event or any other reason whatsoever, fail, refuse or be unable to provide any or all Operation and Maintenance Services and Construction Work contemplated hereby and LIPA or any Governmental Body finds that such failure endangers or menaces the public health, safety, or welfare, then, in any of those events and to the extent of such failure, LIPA shall have the right, upon notice to the Manager, during the period of such emergency, to take possession of and use any or all of the Operating Assets necessary to transmit and distribute Power and Energy which the Manager would otherwise be obligated to transmit and distribute.”

This clause confers upon LIPA the ability to exercise direct control of National Grid Operating Assets during a Storm Event, and sets up a situation where National Grid management is practically immune from criticism by LIPA (or the public) in the event of nonfeasance or malfeasance.

It seems, therefore, that the dichotomy between the two entities is particularly untenable in the context of a storm event. LIPA with its strong brand identity and exclusive financial responsibility has only two choices: accept zero control over NG’s performance (due to lack of a penalizing metric) or take 100% control through its contract emergency powers. On the other side of the relationship, NG has limited brand responsibility, no financial stake, and limited business risk. At the same time, NG has the industry expertise and the operations personnel necessary to assess, recommend, and install capital improvements.

4.3.3 COMMUNICATIONS POLICY

Under the terms of the MSA, LIPA retains “the right to determine customer and public communications policy.”³¹ This, perhaps, evolved under the same sentiment that caused the authoring of the “Naming Guidelines,” referenced above. Regardless, the communications protocol, which prohibits direct and unfiltered communication by NG directly to municipal governments, media, and customers, has proven to be a significant issue of public concern in “grey sky” conditions.

By way of practical example, in the aftermath of Hurricane Sandy, LIPA customers required estimated times for restoration (ETRs) in order to plan accordingly for both personal and professional situations. ETRs are formulated based on damage assessments. These damage assessments are initially logged into the outage management system by sub-station area coordinators (SACs). Based on this information, the ETR would be developed. This ETR would then be, along with many others, conveyed up the NG chain of command and, on a macro-level, conveyed from NG to LIPA during twice-a-day operational meetings. NG and/or LIPA would then construct “talking points,” which, when approved by LIPA, would be distributed to customer service representatives, added to the lipower.org website, and sometimes disseminated via press release. Regardless of how fast these measures could be completed, the communications protocol limited NG SACs from discussing power restoration directly with their local service area customers, or directly modifying website data.

³⁰ MSA, Appendix 5, § (1)(e).

³¹ MSA § 4.5(A)(f).

In any emergency scenario, the flow of accurate information to the public is of paramount importance. A structure in which the gatherer of information is not able to publicly disseminate it without a substantial review process by a third party is cumbersome and could lead to confusion and to pitfalls of (1) stale information; (2) erroneous information; and/or (3) delayed action on the information by members of the public.

4.3.4 STORM PREPAREDNESS

This section will assume and accept the following precept: Hurricane Sandy was a unique storm which caused an unprecedented interruption of services to LIPA customers and required over 14,000 outside-region field workers to assist in the power restoration process. In short, this section accepts that power outage was inevitable and that the scale of such an outage would take days for restoration under optimal conditions. Instead, this section will focus on five areas of human error: (1) division of emergency planning; (2) communication failures; (3) failure to plan for flooding; (4) failure to service critical infrastructure; and (5) failure to upgrade technology. Moreover, it should be noted that the purpose of this report is not to dispense advice for future storms; rather, it is to assess whether the owner/manager relationship, generally, is inherently flawed and whether these issues are symptoms of that flaw.

Division of Emergency Planning

LIPA and NG maintain separate emergency response plans that reference one another. LIPA's plan is the Storm Emergency Response Policy (SERP), a 50-page document that sets forth the responsibilities of LIPA's five emergency areas of operation. The content of the SERP assigns LIPA the responsibility for oversight of emergencies and the responsibility for making key operational and communications decisions during an emergency. For example, LIPA is responsible for identifying the number of crews to be used to respond to an event and developing the core communication message.

NG has a separate emergency plan, the Emergency Response Implementation Plan (ERIP). The ERIP is hundreds of pages long, and consists of a compendium of procedures broken down by operational function. The ERIP is drafted and stored by NG, but its contents and any changes thereto are reviewed and approved by LIPA prior to becoming effective.

The existence of two interrelated but functionally distinct emergency plans creates confusion and inefficiencies that hamper expedient response during an actual emergency. First, the situation creates a lack of clarity about which entity is ultimately responsible for the effectiveness of the plans. LIPA has ultimate sign-off authority over the ERIP, but it is unclear how much review actually takes place and whether LIPA has the operational expertise to provide meaningful feedback or criticism of proposals. NG has the experience and expertise to propose new procedures but its proposals must go through the LIPA vetting process before they can be implemented. For example, an interview with a high level NG employee revealed that a post-Irene plan to coordinate debris removal with local municipalities had been drafted but not yet approved when Sandy hit – over one year following Irene. The Commission also learned that, when the Sandy restoration process got underway, NG implemented a proposed procedure; *i.e.*, a procedure that had not yet been approved or even used as part of any pre-storm drill performed by the NG staff.

There is also the related issue of LIPA personnel's limited access to the NG ERIP or readily being able to determine whether the version is the latest. The most up-to-date, complete version of the ERIP is housed on the NG intranet system available only to NG employees. LIPA employees who seek to obtain copies of specific NG ERIPs are instructed to contact LIPA's Director of Strategic Planning as opposed to having it readily available via print or on a company shared database. Indeed, LIPA's document production in response to the

Commission's subpoena suggests that, to the extent LIPA employees have in their possession copies of the ERIP, those copies may not be up to date.

Given the interdependence of LIPA and NG's emergency operations, it is imperative that personnel from both utilities have a clear and complete understanding of the combined emergency response. Based on information reviewed to date, this does not seem to be the case.

Breakdown in Communications

The Commission's investigation of LIPA's response to Hurricane Sandy suggests that LIPA is still struggling with how best to provide timely information to its customers. From local municipalities to individual customer complaints, the Commission heard account after account of LIPA's inability to communicate accurate, real-time information about outages and restoration. To name a few examples, a provider of critical infrastructure described being unable to reach a live person at LIPA following Hurricane Sandy, and New York State emergency management officials reported that LIPA officials were reluctant to provide customers with specific ETRs, claiming that they were LIPA's "proprietary information."³²

LIPA's communication problems are aggravated by LIPA/National Grid's fragmented operational relationship. As DPS concluded in the aftermath of Irene, and as exhibited again in Sandy, the division of responsibilities and approval processes creates unavoidable delays in the dissemination of information to the public.

Lack of any Plan to Undertake Expedited Inspections of Buildings Located in Flooded Areas

LIPA's service territory is wholly contained on an island and is often subjected to Gulf Stream weather events. As such, there is an inherent flooding risk from storm surge and, indeed, several storms have resulted in flooding of Long Island over just the past few years. As shown in the aftermath of Hurricane Sandy, flooding can cause substantial damage to both infrastructure (*e.g.*, roads, utility equipment, railways and subways) and housing. Flooding can also enter into the basements and lower levels of buildings, without causing any structural damage. Pursuant to protocols in place for such flooding, the applicable utility shuts down or de-energizes those areas in anticipation of significant flooding and in coordination with evacuation activities. The reality is that, after the weather event has concluded, some buildings may have been flooded, and others not at all. The de-energization process is entirely precautionary; its purpose is to protect the public from fire and electrical hazards posed by wiring and circuits that may have come into contact with flood water.

In the normal course, electrical inspectors would then inspect each of the buildings in the de-energized area to determine if any wiring or circuits had come into contact with flood water. Pursuant to what appears to be standard utility practice, the owner of a building must provide the utility with a certificate from a certified inspector as a pre-condition for the building being re-energized. This process can be uncomplicated under conditions where perhaps hundreds of buildings are within a de-energized area and need to be certified as safe prior to re-energization. Hurricane Sandy, however, laid bare the lack of planning to address a situation where thousands of buildings are located in a de-energized area. Indeed, during Sandy, over 100,000 buildings were de-energized.

The Commission has determined that neither LIPA nor National Grid's emergency plans make reference to safety inspections or to the re-energization of flooded areas. LIPA's emergency protocol – the SERP – which is supported by NG's ERIPs, does not consider the mass restoration of power in the wake of a major flooding

³² See Dec. 7, 2012 Letter from Critical Infrastructure Provider to the Moreland Commission; Memorandum Regarding Dec. 4, 2012 Interview with Senior Government Officials From the New York State Office of Emergency Management.

event. The only reference to restoration of power to a flood-affected customer appears in LIPA's Policies and Procedures Manual (the "Redbook," a manual LIPA typically provides to contractor electricians), and reads as follows:

"On ALL fire and flood damaged homes, it will be necessary to obtain an electrical inspection certificate from an approved inspection agency and provide it to LIPA before re-connection."³³

While the term "approved inspection agency" is undefined in LIPA's Redbook, it appears that it refers to approved companies that perform building inspections on behalf of Towns usually in the context of issuing certificates of occupancy. However, neither the Redbook nor LIPA's tariff is entirely clear on this point.

Compounding the absence of any written protocol, there was a failure to identify the risk of flooding during LIPA's July 2012 emergency response drill.³⁴ The LIPA emergency response drill involved emergency personnel from various municipalities. At that drill, with both NG and LIPA participants being present, category 1 and category 2 hurricanes were supposedly contemplated. Yet, while plans for *de*-energization of service territories were discussed (due to anticipated damage to the electric systems by flooding), there was no *re*-energization plan discussed. On a practical level, this means that, during the course of the drill, LIPA/NG simulated throwing a switch to cut power to an entire geographic area and then ended the exercise without throwing the switch back to the "on" position. The drill also amounted to a missed opportunity for LIPA officials to convey to the invited municipal representatives that there was a need for municipalities to develop a flood plan and to coordinate with LIPA/NG staff in its execution.

Additionally, Hurricane Sandy was not an unanticipated storm event. Prior to Sandy, weather forecasters predicted a large storm surge on Long Island. LIPA was also aware and actively anticipating a large storm surge and potential flooding. For example, LIPA took steps before the storm to minimize flood damage to its equipment. The Commission has obtained documents that demonstrate LIPA and National Grid's internal understanding of the potential severity of the storm surge and flood threat.

Notes taken by a senior National Grid employee during LIPA and National Grid's internal storm anticipation meetings show that LIPA was well aware of the potential storm surge and flood threat. For example, it was noted during an October 25, 2012 LIPA-National Grid storm anticipation meeting that the Sea, Lake and Overland Surges from Hurricanes (SLOSH) maps should be reviewed to identify potential flooding areas.³⁵ The National Oceanic and Atmospheric Administration (NOAA) prepares the SLOSH storm surge prediction model. The SLOSH model is a computerized numerical model developed by the National Weather Service to estimate hurricane storm surges. The SLOSH projection map shows that certain areas of southern New York and Long Island were likely to be flooded during a hurricane storm surge.³⁶

The issue of flooding was again raised during an October 26 internal meeting. Notes from that meeting state: "Full moon Sunday will add to chance of potential flooding on south shore."³⁷ In addition, the weather update

³³ LIPA Redbook, Page 2.

³⁴ It should be noted that this drill was held long after Hurricane Irene, which flooded large portions of upstate New York, some of which were within National Grid's upstate service territory.

³⁵ Oct. 25, 2012 Storm Anticipation Meeting ("Reviewing slosh [sic] maps for potential flooding. Condition Red declared as of 4 PM.").

³⁶ National Oceanic and Atmospheric Administration, SLOSH Map of New York State Coastal Counties Hurricane Storm Surge Zones.

³⁷ Oct. 26, 2012 Storm Anticipation Meeting.

during an October 27 internal meeting stated that Long Island should “[e]xpect 2-4 inches of rain and large storm surges on south shore and in Long Island sound.”³⁸ The same weather forecasts were made during the October 28 internal storm anticipation meeting.³⁹ In short, prior to Storm Sandy, both LIPA and National Grid were internally discussing the potential risk of flooding to Long Island.

Yet, during and in the aftermath of the storm, LIPA remained vague in terms of the process that the owner of a building in a de-energized area would need to take to have the building re-energized. For example, LIPA did not expressly inform customers of the re-energization and inspection plan until November 11, 2012.⁴⁰ Prior to November 11, however, LIPA’s communications to customers and government officials were fragmented and vague. On October 29, 2012, LIPA/NG management, through internal communications, recognized the need for a plan for mass restoration of power to flooded areas. Notes from a November 1, 2012 internal storm restoration meeting provide that, in regards to safety inspections, “[m]ost customers do not know responsibility and what needs to be done. Need to get some generic information out.”⁴¹ Similarly, on November 2, 2012, LIPA acknowledged to municipal officials that no plan exists for mass restoration of power to flooded areas. Then in a November 5, 2012 press release, LIPA advised its customers that electrical inspections would need to occur prior to a flooded area being restored. Here, LIPA again stated that it was working with local municipalities in this regard. Another press release from November 10 states that “if damage is too severe repairs to [the] home or an inspection must be completed before the house can be reconnected to the grid.”⁴² Finally, on November 11, LIPA issues a press release warning that customers with flooded homes must produce an electrical inspection certificate before power can be restored. In short, LIPA’s messaging to customers was often vague and non-specific with respect to the process by which electricity could be restored.

In his testimony before the Moreland Commission on December 20, 2012, COO Michael Hervey stated that the municipalities were always responsible for this type of emergency planning, as the damage to the electric system caused by flooding were “walls in” and LIPA’s jurisdiction stopped at the meter. While this may be true it does not absolve LIPA of failing to appropriately communicate to building owners and municipalities the process by which the owner of a building in a de-energized area obtains a certificate allowing the building to be re-energized.

Another aspect of this assessment involves the misuse of an important human resource. NG maintains an Emergency Management Department which is staffed by two coordinators and one senior coordinator. The senior coordinator, Bob Iberger, had an impressive pedigree in emergency management buttressed by over 31 years in local law enforcement. Mr. Iberger’s “blue sky” responsibilities consisted of the development of emergency response measures. However, both during and in the aftermath of Hurricane Sandy, NG positioned Mr. Iberger in the Suffolk County Emergency Command Center as a “LIPA representative.” In this role, Mr. Iberger was no longer asked to develop responses to the various emergency scenarios being encountered and was further removed from any operational oversight of the emergency plans that he had already developed. Rather, Mr. Iberger’s sole function was to receive an information request from a government official, relay that request to LIPA headquarters, await a vetted response, and convey any information back. Essentially, Mr. Iberger was positioned as and served as an information bottleneck to the Suffolk County law enforcement officials, so that individual e-mails and/or phone calls were not made to LIPA headquarters en masse.

³⁸ Oct. 27, 2012 Storm Anticipation Meeting.

³⁹ Oct. 28, 2012 Storm Anticipation Meeting.

⁴⁰ LIPA Press Release (November 11, 2012).

⁴¹ Nov. 1, 2012 Storm Restoration Meeting.

⁴² LIPA Press Release (November 10, 2012).

Consequently, on November 7, 2012, after LIPA/NG had officials recognized the need to develop a flood-restoration plan, this was tasked to Ted Pappas, VP of Transmissions Operations and Compliance, who possessed no emergency management credentials and whose “blue sky” functions did not encompass the distribution of power to residential customers.⁴³ It took over a week for LIPA and National Grid to develop a plan to re-energize flooded areas. Thus, before the re-energization and inspection plan had even been *developed*, customers in flooded areas had been without power for over a week.

Gap in Identifying Critical Infrastructure

There was a significant gap in the identification and prioritization of critical infrastructure such as transportation, telecommunications, and major fuel terminals. In testimony before the Moreland Commission, Bruce Germano, LIPA Vice President of Customer Service, stated that LIPA assigned account managers to act as liaisons to “major clients,” further describing that the parameters of a major client were based on density of customers in a given structure. This represents a focus on population-based restoration as opposed to a service-based restoration. LIPA customers include, among other critical infrastructure, telecommunications, mass transportation and fuel providers that need power to provide other essential services to the public. These assets should be identified in an emergency response plan for rapid restoration.

Archaic Outage Management System

LIPA’s current Outage Management System (OMS) is antiquated. LIPA continues to use an outdated, 25 year-old OMS known as the Computer Assisted Restoration of Electric System (CARES). CARES plots customer outages and field damage information onto a geographical map of the power network. During routine operations, CARES will group together the outage jobs that can then be dispatched into the field. Once survey damage information is made available (through physical survey), it can then be linked to the job for which it is associated. As set forth in the DPS’s report on LIPA’s response to Hurricane Irene released in June 2012, although CARES “has been modified and customized over its many years to serve LIPA and NG’s requirements[,]... it lacks the ability to manage large scale outages and is not a platform that can take advantage of the current advances in technology.”⁴⁴ For example:

- “There is no GIS connectivity even though LIPA and NG now have GIS data for its system.
- The OMS system is a mainframe based COBOL application. Mainframe-based systems are rapidly being replaced because their main programming language is COBOL. COBOL programmers are increasingly difficult to locate given the age and obsolescence of this computer language.
- The system was patched together over many years and was not designed as a comprehensive system.”⁴⁵

DPS therefore found that the antiquated CARES system contributed to communications issues and lack of estimated restoration times.⁴⁶

⁴³ Mr. Pappas’ daily responsibilities involved monitoring the flow of power onto Long Island and to the substations. Mr. Pappas had no responsibility over the distribution network.

⁴⁴ In the Matter of the Review of Long Island Power Authority’s Preparedness and Response to Hurricane Irene, Case 12-E-0283, New York State Department of Public Service (June 2012), at 38.

⁴⁵ Id at 39.

⁴⁶ In the Matter of the Review of Long Island Power Authority’s Preparedness and Response to Hurricane Irene, Case 12-E-0283, New York State Department of Public Service (June 2012), at 39.

4.4 ASSESSMENT OF WARNINGS

One of the purposes of this report is to assess the existing structure's inability to comport with prior mandates or advice. In that respect, the subcommittee reviewed two prior advisory reports issued to LIPA under differing circumstances:

- In 2006, LIPA hired Navigant Consulting to assess its operational condition and provide recommendations.⁴⁷
- In 2011 into 2012, the New York State Department of Public Service assessed LIPA's preparation and response to Hurricane Irene (August 2011) pursuant to a Memorandum of Understanding.⁴⁸

Both of these reports made certain findings and provided recommendations. Several recommendations directly spoke to the issues discussed above, which still existed at the time Hurricane Sandy hit Long Island.

4.4.1 TECHNOLOGICAL IMPROVEMENTS

In July 2006, Navigant Consulting, Inc. recommended that LIPA "implement an electronic damage inventory system," reasoning that "slow damage inventory...forces management to make suboptimal procurement and allocation decisions." It went on to state that "damage inventory is critical to the restoration process."⁴⁹ In connection with the above recommendation, Navigant recommended the implementation of a "resource control system to track all restoration personnel, crew vehicles, and critical equipment."⁵⁰ The system, utilizing GPS technology, would be able, amongst other things, "to provide foreign crews locations awareness thus reducing the chances of getting lost."

In June 2012, DPS found that "LIPA and NG can make better use of technology to improve the damage assessment process," specifically noting the following:

"The damage survey process relies on the use of paper documents and maps. Manual processes are employed to enter survey data from paper documents into the OMS [database]. The data is entered into the system by an operator at a substation or at a division control center. NG does not use handheld devices, smart phones or tablets either to input data or to provide maps to surveyors. LIPA and NG have not leveraged any Geographic Information Systems (GIS) capabilities into the existing OMS. The system continues to rely on paper maps and the internally developed grid system."⁵¹

"Many substations only had dial-up internet access that did not provide sufficient bandwidth to send and receive data to and from the substation."⁵²

"The lack of a modern, fully automated Outage Management System meeting industry standards was one of the biggest shortcomings in the storm restoration effort. It precluded

⁴⁷ Per the testimony of LIPA COO Michael Hervey, this consulting service cost LIPA approximately \$100,000.

⁴⁸ As stated above, DPS has no statutory oversight responsibilities for LIPA.

⁴⁹ *Storm Hardening Initiatives*, Navigant Consulting, at 45.

⁵⁰ *Id.* at 43.

⁵¹ *In the Matter of the Review of Long Island Power Authority's Preparedness and Response to Hurricane Irene, Case 12-E-0283*, New York State Department of Public Service (June 2012), at 27.

⁵² *Id.* at 37.

the proper communication of restoration information to customers and government officials.”⁵³

The OMS computer system in place at LIPA/NG was approximately 25 years old, written on “COBOL” programming, which was so old that “COBOL programmers [were] increasingly difficult to locate given the age and obsolescence of this computer language.”⁵⁴

For each of the above, DPS noted that these were recommendations made six years prior by Navigant Consulting which LIPA had failed to adopt. LIPA, in response to the DPS inquiry, did note that system upgrades to comport with the Navigant recommendations were underway, and provided the following timetable to completion:⁵⁵

- Development (Jan. 2011 – Jun. 2012)
- Mobile solution (Mar. 2012 – Jul. 2012)
- Factory Testing (Feb. 2012 – Jun. 2012)
- Mobile solution (Jun. 2012 – Jul. 2012)
- Site Acceptance Testing (Jun. 2012 – Aug. 2012)
- Transition (Aug. 2012 – Oct. 2012)
- Production (Nov. 2012 – Dec. 2012)

However, as of this writing, LIPA has yet to upgrade its OMS system as initially recommended in 2006.

4.4.2 STORM PREPARATION

DPS noted that certain sections of the ERIP and SERP were in conflict with one another, and accordingly recommended that LIPA and NG combine the two documents into one emergency plan. Yet, the greater perceived problem was not merely the division of planning, but the division of control:

“[U]nder ‘grey sky’ conditions, shared management runs contrary to placing full control in the hands of the Incident Commander which is an industry best practice.”⁵⁶

As far as communications policy, DPS noted that the prohibition against NG directly communicating with government officials, the media, and consumers (absent a LIPA vetting process), “creates a bottleneck through which all communications must pass.” DPS observed that this requirement “is inflexible and can hinder effective communications in a storm event.”⁵⁷

4.5 CONCLUSION

The dichotomy between the responsibility of operations and the ownership of the T&D system appears to cause a multitude of issues, ranging from grey sky communication delays to blue sky capital improvements.

⁵³ *Id.* at 41.

⁵⁴ *Id.* at 38.

⁵⁵ *Id.* at 41.

⁵⁶ *Id.* at 90.

⁵⁷ *Id.* at 50.

The forthcoming commencement of the Operation Services Agreement (OSA) with PSEG, noted above, modifies the dichotomy in various ways. First, LIPA acquires more direct management over the T&D system by assigning executive-level staff to a “Joint Operations Command” with PSEG. Second, all operation expenses, not just storm event expenses, become “pass-through expenditures” to LIPA – the assumption being that LIPA’s greater direct financial stake in the operation of its system will evoke sharper decision-making. Yet, the bulk of the owner-manager relationship remains the same, including those tenets which apply to emergency planning. In short, absent meaningful reform, the dichotomy – and therefore the issues discussed above – remains in LIPA’s future.

5 RESTRUCTURING LONG ISLAND’S ELECTRIC UTILITY SERVICE

The current relationship, wherein LIPA delegates its day-to-day responsibilities to an outside contractor, is untenable. This investigation uncovered numerous examples of overlap of roles, conflicting messages and public information, and confusion as to accountability and ultimate responsibility. LIPA has attempted to shift its responsibility to provide safe and reliable electric service to a contractor. This arrangement is surely not in the best interests of the residents of Long Island and the Commission urgently recommends that serious consideration of a better alternative should be pursued.

The Commission has considered three options, discussed below, as possible longer-term remedies for the current inadequacy of the LIPA structure. The first is the sale of LIPA or its assets to a private company; the second is the assumption by LIPA of full public ownership and operation of the T&D system and the provision of electric service on Long Island, ending the contractor relationship (i.e. “public power”); the third is public ownership and operation of the system by NYPA, which would maintain LIPA as a separate legal subsidiary of NYPA. In addition, the Commission recommends for the immediate term and perhaps longer the establishment of a strong transition plan that ensures safe and reliable service until a long-term solution is implemented. In this respect, consideration should be given toward NYPA overseeing LIPA during the transition period, specifically the management and operations of the service area. Because any such interim arrangement may be in place for some time, careful consideration should be given to structuring it so as to ensure Long Islanders are adequately protected.

5.1 LIPA: PRIVATIZATION

While the Commission identified several options in the Interim Report regarding the future of LIPA, the Commission recommends privatization. There is no question that LIPA could be operated much more efficiently than it is today, particularly if it was purchased by an existing electric utility company which could share staff, facilities and systems. Potentially hundreds of millions of dollars in synergy benefits could be achieved in a privatization to offset privatization costs, including efficiencies in the areas of operating and maintenance costs, power supply, fuels management, and contractor fees. These “synergies” could be used to keep rates after a sale in line with currently projected rates. Importantly, under this option, the PSC, as it is with every other investor-owned utility in New York, would be the new entities’ independent regulator, ensuring that any future rate requests are fully justified, plans are in place for storm response and other contingencies, and statewide public policies (e.g., energy efficiency and renewable energy programs) are applied consistently across the state.

The challenge associated with privatization would be to sell LIPA’s assets and address its existing debt burden in such manner that minimizes any potential increase in electric rates in LIPA’s service territory. In particular, the Commission points out that LIPA’s “rate base” assets, that is, the productive assets that LIPA uses to provide service and on which it earns revenue, have a book value of approximately \$3.5 billion. In contrast, LIPA’s total debt outstanding is approximately \$7 billion. In other words, there is a balance of debt

that is \$3.5 billion in excess of LIPA's book value to a private company.⁵⁸ That remaining "stranded" debt after a sale would have to be repaid over time by LIPA ratepayers, regardless of the outcome of a sale of the productive assets. The rates attributable to that stranded debt, plus the rates charged by the new private operator for provision of service, would together need to be affordable for ratepayers and ideally no higher than the rates LIPA would charge in the status quo.

There would be several costs that would increase due to a privatization. Proceeds of a sale, pursuant to the terms of LIPA's bond resolution with its bondholders, would have to be used to retire debt. By its terms, most of that debt cannot be immediately retired, or "called", until a number of years in the future. Another portion must remain outstanding until final maturity. In order to relieve LIPA of those obligations, US Treasury securities would have to be deposited in an escrow fund to pay those obligations when due. Those securities, because of today's low interest rates, will earn much less than the interest rate on LIPA's bonds, which were issued in higher interest rate environments. This will be an incremental cost of a private sale.

Another large incremental cost would be the requirement for the new private owner to fund its purchase price, and all future capital needs, with higher cost investor equity and taxable debt, replacing LIPA's ability to issue debt at tax-exempt interest rates. That incremental funding cost, along with the new owner's need to pay tax on profits, adds several hundred million dollars to the transaction cost.

With respect to the stranded debt described above, there are many examples of such costs being repaid over time using "securitization", or special ratepayer charges dedicated to the purpose of debt retirement. Once dedicated by statute, those charges can actually enable the debt to which they are dedicated to become "AAA"-rated, resulting in lower interest costs and therefore savings in rates. Preliminary analysis suggests that under optimal circumstances, together with the potential synergies achieved by an existing buyer, the securitization method could produce rates that are stable in the short run, while private ownership and operation could improve the level of service by addressing the many problems associated with the current operating structure.

5.2 PUBLIC POWER: LIPA OWNERSHIP AND OPERATION OF THE T&D SYSTEM

Another alternative that the Commission identified is full ownership and operation by LIPA of the T&D system. This would entail ending the contractor management and operation of the system, and moving those responsibilities into LIPA. LIPA would become the direct employer of all of the employees currently providing electric service, and would be directly responsible and accountable for the quality of service.

This "public power" structure would theoretically solve the problem of the lack of accountability and clarity in lines of management and communication, and would preserve the ability of LIPA to issue tax-exempt debt to fund its capital needs. It would also ensure that Federal Emergency Management Agency (FEMA) financial support would continue to be available in future storms—a benefit not available to private companies. Public power proponents also argue that the presence of a substantial public power system in a region leads to healthy "yardstick" competition between public and private systems, with each one being used as a way to establish metrics and measure the accomplishments of the other.

While cognizant of the many possible benefits of public power, the Commission is also aware that it may cause potential problems, particularly in the context of creating a unified utility out of the LIPA-National Grid or LIPA-PSEG Long Island structure. Some of the potential problems are as follows:

⁵⁸ LIPA also owns an undivided 18% interest in the Nine Mile Point Unit 2 nuclear power plant, which it inherited from its predecessor, LILCO. Those interests would presumably also be sold, and would reduce the debt by several hundred million dollars.

- Loss of confidence in LIPA – However structured, it is highly questionable whether customers in LIPA’s service territory will ever regain confidence in an entity carrying the LIPA brand.
- Potential for conflicting political and economic interests – The conflicting political and economic interests associated with a fully municipalized LIPA would remain. There would still be a tension between the need to set rates that are sufficient to pay for reasonable operating and capital expenses and the pressure that elected officials feel to keep rates low in the near term. The Commission believes that this pressure, over time, has contributed to the situation that LIPA finds itself in today: massive debt that has not been paid down as planned; funds that should have been spent for storm preparation diverted towards other expenses; and failure to invest in modern computer systems that would have paid dividends many times over in avoided expenditures later.
- Lack of incentives for continuous improvement – The ability of private companies to use compensation structures that provide incentives for improvements in efficient operation and customer service is difficult to replicate in a public agency. While there are examples of such incentive compensation structures in public utilities in other states, none exists in New York State. Without these incentives, costs will tend to rise, while cost-saving measures will tend to lag.
- Limits on the ability to recruit qualified executives – Similar to the incentives problem, public utilities generally do not pay the kind of salaries necessary to attract qualified candidates. This is particularly the case where LIPA would be competing for the same executives as the several investor-owned utilities in the New York City metropolitan area (Con Edison, Orange & Rockland, Central Hudson, PSEG of New Jersey, and Connecticut Light and Power). While there are some publicly-owned utilities in the U.S. that pay comparably low salaries, they do so by hiring junior employees and then training and promoting them over decades. If LIPA were municipalized, it would have to bring highly-trained management in from elsewhere into a very challenging situation competing against opportunities offered by other companies.
- Inability to capitalize on expertise and synergies – Keeping LIPA as a standalone entity would forego the opportunities to combine its operations with another utility and achieve economies of scale.
- Addition of over 2,000 employees to an already overburdened State employee benefit system - National Grid Long Island presently employs more than 2,000 employees in LIPA’s service area. The new entity, regardless of public or private status, would need to immediately absorb a substantial amount of that workforce to ensure continuity in the provision of safe reliable service. Although the revenues that LIPA generates from ratepayers may offset the salaries of the workforce, the new employees would also need to be enrolled in the States’ employee benefit system, thus adding to an already overburdened state pension system.

5.3 PUBLIC POWER: NYPA OWNERSHIP AND OPERATION OF THE T&D SYSTEM

This structure would be similar to the one discussed above, except that NYPA would assume ownership and operating responsibilities. LIPA would be purchased for a nominal amount (i.e. \$1.00) and maintained as a separate legal subsidiary of NYPA.

Electrical system revenues and expenses from Long Island and the Rockaway Peninsula would be kept completely separate from existing NYPA funds. Each entity would have its separate classes of debt and neither would have a claim on the other’s revenue or assets. This approach is used by Memphis Light, Gas and Water, Los Angeles Department of Water and Power and Jacksonville Electric Authority, among others. The NYPA Bond Covenant already provides for a “Separately Financed Project” to be completely walled off

from the revenues and reserves (the “Trust Estate” providing for bondholder security) associated with NYPA’s core business but that covenant may need to be further strengthened

NYPA’s statutorily-directed provision of low-cost hydropower to Upstate and Western New York under its Expansion Power, Replacement Power and Preservation Power programs would remain unchanged.⁵⁹ The availability and eligibility criteria for NYPA’s various economic development programs such as ReCharge NY would also remain unaffected. Moreover, the current LIPA statute prohibits LIPA seeking or accepting any NYPA preference hydro power.⁶⁰

A potential advantage of this model versus the LIPA public power model discussed above is that oversight of the entity would be done by NYPA’s successful professional energy industry and financial management team. NYPA would step into LIPA’s role as the contracting party for generating assets; potential synergies could exist as NYPA could develop and own certain generating assets on Long Island under a life-of-unit contract to LIPA. NYPA would serve as LIPA’s energy management and fuel procurement agent and would, in consultation with NYSERDA, oversee LIPA’s efficiency and renewable programs.

Some potential problems with this model are as follows:

- NYPA has no expertise in retail utilities’ operations or retail customer service.
- This model adds an additional layer of management and greater complexity.
- Managing a full LIPA public power effort could divert considerable management attention away from NYPA’s historical mission.
- Notwithstanding legal and financial segregation from NYPA, LIPA’s debt might be viewed as a “moral” obligation of NYPA and have an adverse impact on NYPA’s credit.
- This model could be viewed by Long Island as an upstate takeover, and by Upstate as a drain on “its” NYPA resources.
- Recruitment efforts and offering market salaries could become even more important and a more difficult task to accomplish, given the expanded challenges to NYPA management.
- Modification to NYPA’s statutory authority may be necessary to accomplish this model.

5.4 MANAGING THE TRANSITION TO A FUTURE LIPA

It is important that consideration be given to taking interim steps in the short-term to ensure that Long Island residents have safe, adequate and reliable service. To this end, one option the Commission has considered is to enable NYPA management to oversee LIPA’s management and operations as it transitions to whatever final structure that the State decides to implement. This would be done to take advantage of NYPA’s existing successful and deep management team; to enable greater support and oversight of the operations contractor during a transition period; and to enable NYPA to manage the transition while protecting the public interest. Further review is required to determine if NYPA’s statutory authority must be amended to effectuate this interim measure.

⁵⁹ NY Pub. Auth. L. §§ 1005(13)-(13-a).

⁶⁰ *Id.* at § 1020-dd.

The Commission therefore recommends that further work begin immediately on planning and executing a transition to a new LIPA structure, making sure that all necessary measures are in place to sustain a high level of service quality for LIPA customers. Equally important is the need to ensure that preparations are in place for any future storm that could occur over the presumed transition period. Consideration should be given to enlisting the existing contractor, National Grid, in the effort to make sure that service quality is maintained, even in the event of another major storm. The Commission also recommends that the State's other energy-related agencies, including the DPS and NYPA, oversee the transition, particularly from the standpoint of storm preparation and response planning.

This transitional approach of having NYPA manage LIPA and the contractor relationship could also be maintained for a longer period in the event that, for whatever reason, neither of the other long-term options proves to be viable. While not ideal in that it maintains the bifurcated operating structure, it would be possible to move many of the existing functions performed by LIPA's staff of over 100 employees to National Grid, or PSEG after January 1, 2014, with the contractor firm becoming the "brand" and the provider of all services and communications with the customers and the public. A small number of LIPA employees, under the auspices of NYPA, would remain exclusively in charge of managing the flow of funds to bondholders in accordance with their contractual obligations and the original mission of LIPA as a "holding company".

5.5 CONCLUSION

The Commission has reached a clear consensus that fundamental structural change in Long Island's electric utility is necessary. The existing management contract structure is unique in the U.S. retail power supply industry and is rarely used elsewhere in the world, save as an interim approach to restoring poorly managed utility systems

The criteria for choosing between an investor-owned utility and a public power solution need to include public acceptability, ease of accomplishment, compatibility with New York's energy goals, the avoidance of a politicization of financial and technical decisions, certainty of improved emergency planning and – especially important given Long Island's historically high rates – a strategy to minimize rate increases while ensuring dependable service and emergency preparedness. The U.S. has examples of both systems performing well and of both systems performing poorly. Indeed, individual IOUs and public entities have at one time or another exemplified both extremes. At the same time, neither New York nor the U.S. has any experience in the past few decades with creating a regulated retail public power entity of the kind that is considered here – a unified LIPA that owns and manages its assets, and has day-to-day operational control of the service territory or the same structure but as a subsidiary to NYPA.

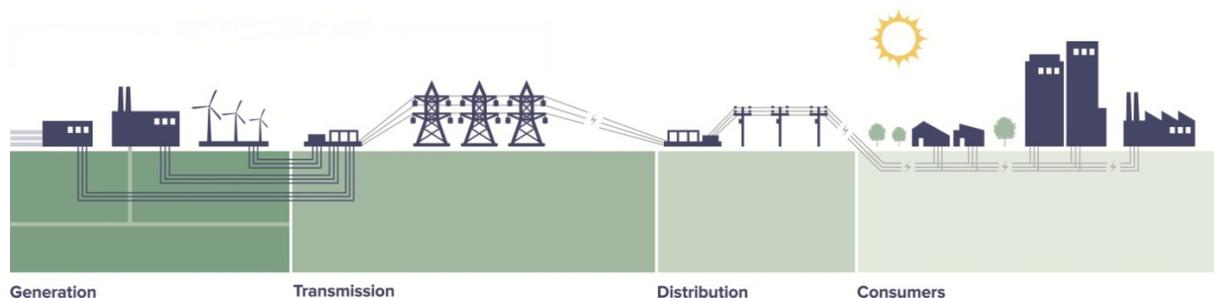
Although all options pose impediments the Commission recommends privatization. The privatization option requires balancing the desirability of a high sale price with avoiding investor expectations that can only be satisfied through rate increases. In addition, a vehicle assuring low interest financing for LIPA's remaining debt post-sale seems essential for rate stability purposes. The transition to improved ownership and management needs to occur as quickly as possible. There is no assurance that emergency planning will not be tested by additional major storms in the near future, and other customer service and rate issues are urgent as well.

The bottom line is that fundamental change is essential in the provision of electric service on Long Island. Detailed costing and feasibility analyses of both options are already underway in State government. Theses analyses, and not ideology or politics, should determine the path forward from here in the best interest of Long Island.

6 IMPROVING UTILITY OVERSIGHT AND ENFORCEMENT MECHANISMS

6.1 OVERVIEW OF THE STATE'S ELECTRIC INFRASTRUCTURE

New York's electricity is provided by a diverse array of generation – 35.7% natural gas, 30.6% nuclear, 18.2% hydroelectric, 9.9% coal, 3.5% other renewables, 1.5% petroleum, and 0.6% other.⁶¹ Electricity generated from these facilities is transported over high voltage transmission lines to substations where the voltage is stepped down to the distribution system level; where the distribution systems deliver the power to the homes, businesses, and other facilities that are deemed the “customers.” Most of New York's power plants are owned and operated by independent power producers and NYPA. These plants are not regulated at the State level, but rather at the Federal level by the Federal Energy Regulatory Commission (FERC) and through a system of real-time auctioning managed by the New York Independent System Operator (NYISO). Virtually all of the transmission and distribution systems, including substations, are owned by the investor owned utilities and LIPA (See Appendix 10.4 for a map of electric utility service territories). NYPA owns generation and transmission, but does not own a distribution system. The regulation of such transmission is segregated; whereas the PSC regulates investor owned utilities, LIPA and NYPA, as public entities, are largely self-regulated. The public power authorities (NYPA and LIPA) are subject only to limited regulation by the PSC, such as required approvals for major transmission and generation facilities, and are subject to limited FERC jurisdiction.



Source: *Energy Highway Blueprint*

Outside of Long Island, virtually all of the State's electric consumers are served by six private T&D utilities overseen by PSC: (1) National Grid (owned by National Grid plc, an international electric and gas company with headquarters in the United Kingdom), (2) New York State Electric and Gas (NYSEG) and (3) Rochester Gas and Electric (RG&E) (NYSEG and RG&E are owned by Iberdrola, a Spanish energy holding company), (4) Central Hudson Gas and Electric (currently owned by CH Energy Group, although a Canadian power company, Fortis Inc., has proposed to purchase the utility and the sale is pending approval of the PSC), (5) Orange and Rockland Utilities (O&R), and (6) Consolidated Edison Company of New York, Inc., which are collectively referred to as the investor owned utilities or IOUs. As noted, LIPA provides service to its Long Island and Queens-based customers via a T&D system that it owns but which is presently operated by National Grid, an outside utility contractor.

⁶¹ U.S. Energy Information Administration, Table 5. Electric Power Industry Generation by Primary Energy Source, 1990 Through 2010 (Megawatthours), available at <http://www.eia.gov/electricity/state/NewYork/xls/sept05ny.xls>.

Each region has one utility that provides service over the existing infrastructure of T&D lines and substations. As a result IOU's operate as natural monopolies and these monopolies have continued to exist because it would be cost prohibitive to have multiple infrastructure systems side-by-side. Nevertheless, the service and rates of IOUs are regulated by the PSC. By contrast, the PSC does not regulate LIPA; instead, LIPA's rates are approved only by its Board of Trustees.

6.2 PUBLIC SERVICE COMMISSION/DEPARTMENT OF PUBLIC SERVICE

The PSC was created in 1907 to, among other things, regulate all utilities, including gas, electric, steam, water, and telecommunications. It is a five-member body, with each full-time member appointed by the Governor, confirmed by the Senate for a 6-year term and removable only for cause. DPS serves as the agency staff for the PSC and currently has approximately 500 employees. The Chairman of the PSC, who is chosen from among the commissioners by the Governor, also serves by statute as head of the DPS. DPS's annual budget is approximately \$70 million, which is funded from an assessment on the utilities it regulates.

DPS's mission is "to ensure safe, secure, and reliable access to electric, gas, steam, telecommunications, and water services for New York State's residential and business consumers, at just and reasonable rates."

The PSC is, among other things, responsible for:

- Overseeing the operations of five types of utility services – electric, gas, steam, telecommunications and privately-owned water supply systems;
- Setting rates for IOU and municipally-owned (electric) utility service;⁶²
- Establishing safety, electric reliability and customer service standards;
- Overseeing the siting of new electric generating facilities with a nameplate capacity 25 megawatts and above, and gas and electric transmission facilities;
- Ensuring the safety of natural gas and liquid petroleum pipelines;
- Authorizing funding through utility bill surcharges, approving programs, and auditing the energy efficiency and renewable energy programs of the IOUs and NYSERDA;
- Emergency planning and response associated with the utilities that it regulates; and
- Investigating utilities' storm responses.

The PSC reviews the prudence of utility investments and expenditures and may disallow recovery from ratepayers of imprudent investments. The PSC also has the authority to pursue penalties up to \$100,000 per day for continuing violations but only through the initiation of a court action based on violations that are "knowingly" committed.

DPS staff, among other things, represents all ratepayers and the public interest in PSC proceedings, recommends and monitors utility compliance with service and operating standards and administers regulations issued by the PSC. DPS Staff responsibilities also include advising the PSC on the matters listed

⁶² The PSC has general oversight over municipal electric utilities. *See, e.g.*, Pub. Serv. L. § 5.2. However, those municipal electric systems that purchase all of their power requirements from NYPA are expressly exempted from PSC jurisdiction. *See* Pub. Auth. L. § 1014.

above and under the PSC's guidance, representing the PSC in state and federal court proceedings, developing and implementing State regulatory and energy policies, and receiving, investigating and resolving complaints on billing, services and other utility practices.

6.3 PRELIMINARY INVESTIGATIVE FINDINGS CONCERNING THE REGULATION OF IOUS

6.3.1 BACKGROUND ON PSC REGULATION OF UTILITIES

The importance of the regulation of utilities cannot be overstated. As monopolies, utilities operate without any competitive pressure or risk of customer abandonment to incentivize them to provide customers with safe and reliable services at reasonable rates. Regulation is a necessary surrogate for competition where competition does not or cannot exist. Thus, effective regulatory oversight is needed to ensure that utilities provide safe and adequate service on an ongoing basis.

Based upon a review of the Public Service Law, PSC rules and regulations, past PSC orders, and interviews with DPS personnel, it appears that: (1) the PSC does not utilize its statutory authority to full effect; and (2) its statutory enforcement authority is inadequate and needs to be updated.

Interviews conducted by the Commission indicate that the philosophy of utility oversight changed in the mid-to late-1990s to favor market competition and a less active approach towards regulation. For example, in 1996, the PSC largely removed itself from regulating the generation of electric power when it adopted a policy that favored the divestiture of utility electric generating assets as a means to commence competition for the wholesale electric power market. In so doing, the PSC reasoned that "competition in the generation and energy services sectors of the electric industry will be pursued for its potential to reduce rates over the long term."⁶³

In the past decade, staff levels at DPS have declined due to lower staffing requirements following deregulation and the dissolution of LILCO, as well as from increased retirements and hiring limitations driven by budget constraints. The FY 2012-13 budget provides funding for 524 full-time equivalents (FTEs), representing a decrease of 10 FTEs from the 2011-12 level of 534 and 31 FTEs from the 2010-11 approved level of 555. Actual staffing numbers, however, at the beginning of this current fiscal year were far below approved levels as a result of extensive retirements during SFY 2011-12. As of December 19, 2012, with the support of the Budget Division and the Governor's Office, DPS has filled positions resulting in an increase to 508 FTEs. Although the FY 2010-11 budget permitted 555 FTE's the average FTE's in DPS over the past 15 fiscal years going back to 1998 is 538. The Commission believes the 524 FY 2012-13 employment level should be maintained for the FY 2013-14 budget, and that the DPS should recruit and hire up to that level.

During this period of workforce reduction (mid-to late-1990s) and changing regulatory philosophy, the PSC relaxed its oversight of utilities and, in some instances, stopped performing some of its statutorily required functions. In particular, the Commission's investigation found that the PSC and DPS:

- Ceased performing, operational audits from about 1996 until 2006 and management audits from 1996 until 2008 despite a statutory requirement that it conduct such audits at least every five years;
- Lack sufficient authority to hold utilities accountable when failures to provide safe and adequate service are identified;

⁶³ Public Service Commission, Case 94-E-0952 – Competitive Opportunities, Opinion 96-12 (issued May 20, 1996), at p. 96.

- Generally prefer informal processes rather than court proceedings which, if commenced, could result in the issuance of formal orders and the assessment of significant penalties for breach of those orders.;
- From about 1996 until 2006, performed rate audits on a more infrequent basis, preferring to enter into multi-year, negotiated rate settlements that resulted in more infrequent review of utility operations; and
- Reallocated scarce resources available for core mission functions by reassigning some staff to a new Office of Energy Efficiency and Environment (OEEE) that provides regulatory oversight of clean energy programs. Of the 39 employees currently staffing this new office, 18 came from the Office of Electric, Gas, and Water, and its predecessor, the Office of Electricity and Environment, 3 came from the Office of Accounting and Finance, 1 came from the Office of Consumer Services, and the remaining 17 were new hires.

6.3.2 AUDITS

Management and Operational Audits

The Public Service Law requires the PSC to conduct two audits, the utility management audit and the operational audit, at least once every five years. Such audits are required, at a minimum, to investigate each utility's "construction program planning in relation to the needs of its customers for reliable service and an evaluation of the efficiency of the [utility's] operations."⁶⁴ Historically, the PSC and DPS Staff have treated these two types of audits in a different manner. The management audit generally constituted a broad study of a utility's overall operations and was conducted with the assistance of an outside consultant, while the operational audit focused on specific subject matters and was often performed by DPS staff only. Prior to 1998, both audits were undertaken and/or overseen by the Office of Utility Efficiency and Productivity. That office consisted of two sections, a Management Section and an Operational Audit Section (each section was staffed with approximately 12-15 employees). The two sections were complimentary to one another in that one section evaluated a specific utility broadly, while the other section could analyze issues across utilities or go deeper into a specific subject matter. Both types of audits ultimately resulted in recommendations regarding how the utility could improve its management and operations.

Following the decrease in staffing levels and the philosophic changes that started in the 1990s, DPS disbanded its Office of Utility Efficiency and Productivity, and ceased performing any audits from 1996 to 2006. Today, a five-person group of DPS personnel residing within the Office of Accounting and Finance has been resurrected from existing agency resources and is tasked with performing management audits of the State's six IOUs. The operational audit section of the former office has not been re-established, and limited operational audits have been performed since 2006.

Management audits as described above constitute a broad review of a utility's operations, as depicted in the following diagram taken from a recent audit by the NorthStar Consulting Group:

⁶⁴ NY Pub. Serv. L. § 66(19).



The management audit reviews how a utility establishes key objectives, goals and strategic plans and translates those three components into operational plans. The electric demand necessary to provide service is evaluated, as well as how a utility secures its electric supply and ensures that its system is capable of meeting the demand.

Budgeting processes are evaluated with respect to consistency with strategic plans, the manner in which such plans are eventually translated into programs/projects, and the ability of management to achieve its goals through its existing resources. The final step is to evaluate the company's proficiency in monitoring its performance, how that information is communicated back to senior-level staff, and how and the extent to which staff provides for subsequent adjustment or refinement.

The strength of an operational audit is that it can take many forms. Thus, for example, an operational audit can be structured to evaluate and review executive pay across all New York utilities, the adequacy of insurance coverage of a given utility, alleged improprieties against a specific utility, the impact of multi-regional geographic operations of New York utilities, affiliate transactions, and even the adequacy of all utilities' emergency management plans. While the management audit analyzes construction-related activities on a utility by utility basis, the operational audit historically allowed DPS to focus elsewhere as the need arose, or was anticipated (i.e. proactive as opposed to reactive audits) and could be performed across utilities if circumstances warranted.

Audit Ineffectiveness

Following the completion of an audit, a utility is required to address the status of its implementation of any audit recommendations only in the context of its next rate case. Generally, following a management audit the PSC directs a utility to file an implementation plan within 30-60 days explaining if it intends to implement an audit recommendation and, if so, how and when each individual recommendation is to be implemented. Following the filing of an implementation plan, the utility is required to file progress updates every four months. DPS staff reports to the PSC twice a year on the status of each open recommendation. While the vast

majority of recommendations are implemented by utilities, there is little in the way of direct consequence for a company rejecting a legitimate recommendation – outside of the context of a potential rate case.

6.3.3 THE PSC'S CIVIL PENALTY AUTHORITY

The only statutory enforcement mechanism available to the PSC is a civil penalty authorized under Public Service Law § 25. A penalty under § 25 is only available through a court proceeding and requires the PSC to prove that a utility “knowingly fails or neglects to obey or comply with a provision of [the Public Service Law], or an order adopted under the authority of [the Public Service Law]” and subjects the utility to a penalty of \$100,000 per day for each day of noncompliance.

According to DPS staff, the high burden of proving a knowing violation has served as a deterrent to litigate penalty cases against utilities and, indeed, during the past ten years, no such cases have been filed in the New York State Supreme Court. While DPS has obtained penalties via settlements entered in lieu of a court case, the weak penalty provision has stymied DPS’s ability to seek more aggressive penalties.

Finally, the penalty amounts provided for in Public Service Law § 25 have not been updated since 1986 and consequently, the deterrent value of the PSC’s penalty authority has significantly deteriorated. For example, Con Edison’s net income for its electric, gas and steam business was approximately \$276 million for a three-month period ending March 31, 2012.⁶⁵ A penalty of \$100,000 per day, even if proven to have occurred for a significant period of time, would still only amount to a fraction of a large utility’s net income.

6.3.4 ADOPTING FORMALIZED ORDERS

As discussed above, the PSC may only seek to impose a penalty when a utility violates a section of the Public Service Law, a regulation promulgated thereunder, or an order of the PSC.⁶⁶ A significant amount of the work performed by DPS staff does not result in the issuance of a formal order. For example, the PSC regularly reviews the performance of utilities in preparing for and responding to major storm or outage events. These reviews result in the issuance of a report that makes certain recommendations on how a utility can improve its response to future storm events. These reports are issued on an informal basis, frequently without the entry of an order by the PSC. Without issuance of an order, the PSC lacks the ability to impose a penalty if a utility fails to implement a recommendation made as part of the review process.

6.3.5 RATE SETTING CASES

DPS regularly undertakes rate setting cases pursuant to its authority to ensure that utilities charge rates that are just and reasonable. Rate setting cases involve an in-depth review of the overall financial condition of each utility, including all of its revenue, liabilities, debt load, capital structure, labor and fuel costs, capital budget expenditures, and service efficiency. The purpose of this review is to ensure that each utility is earning a fair profit while providing safe and reliable service to customers. Rate setting cases are either litigated or settled. When litigated, the administrative judge hears evidence presented by the DPS, intervening parties and the subject utility. The administrative judge issues recommendations that the PSC can accept, reject or modify.

From 1996 until 2006, DPS moved away from litigating rate setting cases and, rather than performing in-depth reviews required by these cases, entered into settlements before the reviews were completed. Instead, DPS increasingly entered into multi-year settlements, increasing the period of time between any in-depth reviews of a utility’s performance and operations. In addition, the multi-year settlements entered into during

⁶⁵ Quarterly Financial Report of Consolidated Edison Company of New York Inc. – filed with the PSC for the quarter ended Mar 31, 2012.

⁶⁶ NY Pub. Serv. L. § 25.

this period of time were often entered into before any significant audit was completed. Since 2007, DPS has returned to pre-1996 practices that include full audit of utility performance and operations prior to final rate recommendations.

6.3.6 GENERAL MONOPOLY OVERSIGHT

While the PSC has statutory responsibility for ensuring that utilities provide safe and adequate service at just and reasonable rates, its authority to weigh whether a given utility is fit to operate a monopoly in the State is relatively weak.

Utilities in the State operate pursuant to municipal franchises – agreements with each of the localities associated with a utility territory. Utilities formed after 1907 also operate pursuant to a Certificate of Public Convenience and Necessity (Public Service Law § 68) issued by the PSC. Presently, the PSC lacks statutory authority to revoke a Certificate thus establishment of a clear authority to revoke, after substantial due process, is recommended by the Commission

6.4 UTILITY OVERSIGHT RECOMMENDATIONS FOR CONSIDERATION

The Commission's review identified a number of areas where the State's regulatory oversight of New York utilities can be strengthened to better protect public safety. Accordingly, the Commission recommends that statutory and other actions be made to put real regulatory and enforcement teeth into the PSC, which for far too long has been a toothless tiger. The recommendations for consideration include:

- The PSC be statutorily authorized to levy administrative penalties against each utility for violations of PSC orders and regulations or upon a finding that such utility has failed to provide safe and adequate service under a "reasonable business" standard (comparable to the prudence standard). The size of the potential penalties should also be increased and be based on a percentage of revenues rather than the current fixed penalty of \$100,000 per day (for example, a daily penalty of 0.02 percent of utility revenues would equate to about \$2 million per day for Con Ed and about \$750,000 per day for National Grid). Provisions should also be adopted to ensure that the penalties are paid out of shareholder capital and not passed on to ratepayers.
- Whenever a management audit is performed, the PSC should be required to issue an order that directs the utility to implement those audit recommendations that the PSC finds to be reasonable.
- Consideration should be given to requiring the PSC to issue an order enforcing compliance with recommendations for emergency management plans.
- Consideration should be given to having a dedicated auditing unit to help ensure that the PSC is well situated to fully exercise its statutory authority and perform not only management audits but proactive operational audits as well.
- Consideration should also be given to creating a dedicated unit to investigate and enforce utility compliance with PSC orders and recommendations, and utility tariffs.
- Statutory changes should be considered to authorize the PSC to formally review the performance of each of the IOUs to provide safe and adequate service. Specifically, consideration should be given to granting PSC authority to, at a minimum of every five years or upon the PSC's own motion for cause, undertake a review of a utility's fitness to provide safe and adequate service and order appropriate relief, including divestiture of some or all of a utility's assets, subject to both due process standards and the need for continuity of service. To ensure compliance with the recommendations put forth by

the PSC after a review, the Commission also recommends the clear establishment of the PSC's authority to revoke the Certificate of Public Convenience and Necessity, after substantial due process is exercised.

- DPS staffing and budgetary levels should be reviewed to ensure they are sufficient to carry out the core functions of the PSC. In the context of that review, cross-training should be provided to existing staff, performance management standards should be established and met, and all necessary technology upgrades should be identified and implemented. In this respect, the Commission finds that there is sufficient justification to recommend that DPS continue to hire to meet the FY 2012-13 approved goal of 524 employees, which would both assist DPS in meeting its core mission and be responsive to the Commission's recommendations.
- Similar to the Sarbanes-Oxley Act, which requires that CEOs certify the validity of their financial statements, consideration should be made toward requiring senior officers of each utility company to annually certify to the PSC that the utility is acting in compliance with all applicable State laws, rules, regulations, orders, and procedures, including the requirement to provide safe and adequate service.
- Consideration should be made to ensuring that appointees to the PSC have demonstrated competence in some aspect of utility regulation as well as a concern for the public well-being. Appointments to the PSC set a tone for the agency in terms of the expectations of the Governor and the Senate. The PSC is too important to New York's economic and environmental future for these appointments not to reflect a high degree of demonstrated qualification and commitment.

7 IMPROVING STORM PLANNING, PREPARATION AND RESPONSE

7.1 UTILITY STORM RESPONSE

The utility storm response investigation has to date included a review of past regulatory reports on utility storm response, testimony provided at public hearings on December 6, 11 and 20, 2012, and numerous interviews of LIPA and National Grid employees, emergency management personnel from the affected counties, and DPS, NYPA and NYSERDA personnel. The Commission's preliminary findings are presented below.

7.1.1 *INVESTOR-OWNED UTILITIES*

The Commission has a concern, which will be further explored, that the six IOUs regulated by the PSC may not be adequately prepared to respond to a major storm event involving significant coastal flooding. Emergency preparedness is often not seen as contributing to short-term profitability. Key components may therefore be sacrificed under rate plans that allow years to go by without detailed DPS scrutiny, especially since the DPS's ability to scrutinize such areas as tree trimming, infrastructure maintenance and the updating and conducting of emergency plan drills has itself diminished over time due to workforce reductions. Historically, the PSC has tended to look to a utility's return on equity as the appropriate place to reflect incentives and disincentives. This works reasonably well in areas in which the PSC is attempting to regulate by replicating the impacts of competition and performance in a competitive market. It may not be effective by itself in areas with a potential for catastrophic failure, such as storm response.

Coastal storm sections of utility storm plans may not be adequately address conditions posed by significant salt water flooding, which presents unique system challenges. Additionally, the utilities likely do not anticipate the impacts of significant salt water flooding, especially Consolidated Edison Company of New

York, Inc. (Con Edison). While on paper Con Edison's storm response plan may appear adequate, the application of that plan during Sandy appears to demonstrate that the plan provided little guidance to the utility in addressing the impact of the kind of significant tidal flooding that occurred.

In addition, the six IOUs continue to have difficulty handling large volumes of calls from customers and public officials that occur during and in the immediate aftermath of storm events. The information provided to consumers during the Recent Storms regarding estimated times of restoration was often inaccurate. During a storm event, restoration time estimates often impact decisions by customers regarding whether to stay in their residences or find alternate housing, and whether to purchase food, medicine, or an emergency generator. At the Commission's December 6, 2012 Public Hearing, a first-hand account of this impact was provided from Dr. Irwin Redlener, the Director of Columbia University's National Center for Disaster Preparedness. Dr. Redlener explained that electricity is the glue that holds all critical infrastructure together, including hospitals, nursing homes, and sewage and water treatment facilities. He noted that the somewhat generalized and in some instances inaccurate utility restoration time estimates in the days after Hurricane Sandy also made it difficult for critical infrastructure customers to make informed decisions regarding their own emergency response plans.

The probe of the utilities' preparedness and response to the Recent Storms is ongoing. The Commission continues to investigate whether the six IOUs are adequately prepared for the significant weather events that may face New York in the future.

7.1.2 UTILITY PREPAREDNESS AND RESPONSE PLANS AND STORM REPORTS

The utility storm response plan is designed to be the "play book" for what a utility and its personnel are required to do prior to, during and after a storm to ensure that service is restored in a safe and efficient manner. The importance of having adequate storm response plans was clearly demonstrated during the Recent Storms. While the investigation regarding utility storm preparedness and response for the Recent Storms is ongoing, the importance of having regulatory oversight of utility response plans requires immediate attention.

Public Service Law § 66(21) requires the PSC to review and approve electric utility storm response plans in a manner to be prescribed by the PSC. While the statute directs the PSC to review and approve utility storm response plans, the PSC's regulations implementing the statute require merely the annual filing of these plans; the regulations do not require PSC approval of these plans. In practice, DPS staff reviews storm plans and makes recommendations as to how the plans should be improved. Moreover, DPS undertakes a review of each utility's response to a major storm that impacts its service territory and prepares a report that makes recommendations on how the utility can better respond to future storm events.

The recommendations concerning storm plans and storm responses are generally made on an informal basis, without the issuance of a PSC order. Even when deficiencies are identified, either through DPS review of a storm plan or through DPS's investigation of a utility's response to a specific storm, the PSC rarely issues an order directing the utility to make modifications to its storm response plans. Because storm plan and storm response recommendations are made on an informal basis, the PSC has rarely sought to impose penalties against a utility for inadequate response or failure to adhere to a storm response plan. Based upon the research to date, it appears that the PSC has taken a reactive rather than a proactive approach to regulating utility storm preparedness and response.

7.1.3 PSC RESPONSIBILITIES DURING A STORM EMERGENCY

In addition to the important role the PSC and DPS play in reviewing utility storm plans and responses, the PSC chair also plays a key role as a member of the New York State Disaster Preparedness Commission (DPC).

Comprised of the commissioners, directors or chairpersons of 32 State agencies and the American Red Cross, the DPC is primarily responsible for the preparation of State disaster plans; the direction of State disaster operations and coordinating those with local government operations; and the coordination of federal, State and private recovery efforts. DPS shares in the responsibilities for preparing State disaster plans with a particular focus on utility aspects of emergency situations. While the New York State Department of Homeland Security and Emergency Service (DHSES) provides the overall coordination and administrative activities with respect to the DPC, DPS focuses on reviewing storm response plans and directing utilities in the effective implementation of restoration efforts. In accordance with existing requirements, DPS prepares and updates annually an Emergency Plan that provides internal emergency coordination procedures associated with each of the utility sectors that it oversees.

7.2 STORM PLANNING AND RESPONSE RECOMMENDATIONS FOR CONSIDERATION

New York's energy supply must be reliable and dependable. A dependable supply of energy is critical to the health and safety of the State's citizenry. To ensure this, the State must be prepared for emergencies, natural or otherwise. Being prepared requires having effective emergency response plans in place long before an emergency arises. Plans alone, however, are not enough. There must also be a demonstrated ability to timely execute emergency response plans when action is needed.

Because energy is so critical to the public health and economic well-being of the State, the public service obligations of regulated utilities are at their apex during emergencies. When utility services are interrupted during extreme weather events or other emergencies, timely restoration of service is vital and can literally become a matter of life or death. As energy system first responders, public utilities must have the ability, capacity, and will to act quickly and effectively.

While the impacts of Hurricane Sandy were unprecedented, the storm has underscored the need for advance planning and a demonstrated and vigorous emergency response capability. While the Commission's investigation of the storm planning and response undertaken by the IOUs is ongoing, the Commission has identified shortcomings in the State's regulatory oversight of storm planning and response that demand an effective response. Good government must protect its citizenry, ensure reliable energy supply, and demand effective emergency response. Strong regulatory oversight is essential and must include clear regulatory authority and the prompt, forceful and effective exercise of that authority where necessary but not overly burdensome. In light of the findings and considerations described above, a number of recommendations are offered below for consideration:

- Public Service Law § 66(21) provides that the PSC "shall require every electric corporation to submit storm plans" to the PSC "for review and approval," and that such plans "shall be filed at least annually." As the statute indicates, strong and regular PSC oversight over utility storm plans is essential. Accordingly, consideration should be given to directing the PSC to dedicate staff to meeting the statutory mandate of annually reviewing all utility storm plans and consideration must be given to direct the PSC to issue enforcement orders and allow penalties against utilities that fail to comply with PSC issued storm plan recommendations. It is also recommended that such review be undertaken in consultation with DHSES.
- Consideration should be given to requiring the PSC to annually certify to DHSES that utility storm plans are sufficient to ensure to the greatest extent feasible, the timely and safe restoration of energy services after an emergency. Accountability helps ensure effective performance. Moreover, the utilities' response procedures and actions should be coordinated with those of other emergency responders.

- Consideration should be given to requiring the PSC and DHSES to participate in effective and meaningful annual drills associated with utility storm plans. The best plan is useless without the capacity to carry it out. A paper review of utilities' storm plans is not enough. The State must insist upon a demonstrated capacity to implement such plans before an emergency arises. It cannot be assumed the plan alone will suffice. The requirement to implement such drills will help identify deficiencies in planning, resources, and coordination. It will also establish an iterative process that will ensure that planning efforts are not wasted.
- As already noted, the Commission recommends consideration be given to statutorily authorizing the PSC to initiate a civil penalty proceeding administratively. Such a proceeding should also be authorized in those situations where a utility has failed to file or properly implement a storm plan. The PSC must have tools to compel utilities to perform needed emergency preparedness and response planning before disaster strikes.

8 STREAMLINING STATE ENERGY PROGRAMS

8.1 STATE ENERGY PORTFOLIO

State government is involved in the energy markets through regulation, ownership and operation of assets (i.e., generation facilities, transmission and distribution systems, etc.), and policy making focused on affordable and clean energy alternatives. Responsibilities for these activities are spread across four State entities -- the PSC, NYSERDA, NYPA, and LIPA.

8.1.1 NEW YORK STATE ENERGY RESEARCH & DEVELOPMENT AUTHORITY

NYSERDA was created in 1975 during the energy crisis. The authority is governed by a 13 member board, with four of those members serving *ex-officio*, including the Commissioners of the Department of Transportation and the Department of Environmental Conservation, the Chair of the PSC and the Chair of NYPA. The remaining nine members are appointed by the Governor with the advice and consent of the Senate. In practice, the NYSERDA Board appoints the President and CEO of NYSERDA. NYSERDA currently has approximately 330 employees and an annual budget of \$740 million, which comes primarily from ratepayer surcharges for clean energy programs, auction proceeds of the Regional Greenhouse Gas Initiative (RGGI), federal grants and state appropriations.

NYSERDA's mission today is to "advance innovative energy solutions in ways that improve New York's economy and environment." When created in 1975, NYSERDA was responsible for funding research and development for innovative technologies to help reduce the State's petroleum consumption, to issue bonds to finance generation utility pollution control projects, and to take over responsibility for overseeing and managing the State's radioactive waste facilities located in West Valley, Cattaraugus County. At that time, NYSERDA's primary sources of funding included an assessment on utilities through Public Service Law § 18-a and through General Fund support.

NYSERDA's roles and responsibilities have since been expanded in two principal ways. First, most of the statutory responsibilities of the New York State Energy Office (SEO) were transferred to NYSERDA in 1995, when the SEO was dissolved. For the most part, these responsibilities include implementing the Department of Energy-funded State energy program, tracking and assessing energy markets, and energy emergency planning for the liquid fuels sector. Second, since 1998, NYSERDA's role has been vastly expanded through proceedings undertaken by the PSC and rules adopted by the Department of Environmental Conservation, to the point where the authority is now responsible for (i) energy efficiency resource acquisitions through the

Energy Efficiency Portfolio Standard (EEPS) program; (ii) renewable resource acquisitions through the Renewable Portfolio Standard (RPS); and (iii) the technology and market development program – with the primary focus on research and development, and technology development. These three newer programs are each funded by an assessment on ratepayers made through previously-issued PSC orders, while additional clean energy programs are funded by revenues generated by the RGGI program. Taken together, these funding mechanisms account for 80% of NYSERDA’s annual \$740 million budget.

NYSERDA is an entity unique to New York and nationally recognized for its contributions to advance clean energy technologies and businesses. In its June 2011 *Sizing the Clean Economy* publication, the Brookings Institution credited NYSERDA’s technology and business development programs as “critical in helping New York create and retain the types of companies that form the bedrock of the clean energy economy.” New York consistently ranks near the top of the American Council for an Energy Efficient Economy’s (ACEEE) Energy Efficiency Scorecard Report,⁶⁷ and NYSERDA plays a significant role in achieving those rankings. ACEEE’s 2012 Energy Efficiency Scorecard Report noted that “NYSERDA is an outstanding model of an effective and influential research and development institution.”

8.1.2 NEW YORK POWER AUTHORITY

NYPA was created in 1931 for the development of hydroelectric power to provide continuous and adequate power supply along the St. Lawrence River. It currently has approximately 1600 employees and generates revenue of roughly \$3 billion. It finances its operations through the sale of bonds to private investors and revenues earned in large part through the sale of its electricity.

NYPA’s mission is to “provide clean, low-cost, and reliable energy consistent with [its] commitment to the environment and safety, while promoting economic development and job development, energy efficiency, renewables and innovation, for the benefit of [its] customers and all New Yorkers.” NYPA is responsible for:

- Operating 17 facilities which generate around 20% of the State’s electricity, with more than 80% of it being hydro-electric power along the St. Lawrence and Niagara Rivers;
- Operating 1,400 miles or one-third of the State’s high voltage bulk transmission lines;
- Supplying power to New York City and Westchester county governmental customers;
- Utilizing its low-cost power (most of which is provided by its hydropower facilities) as an economic development tool throughout the State;
- Providing energy efficiency services, including low-interest loans, to public entities and state and local buildings;
- Promoting clean energy and clean transportation projects and developing and promoting innovative technologies for the generation and transmission of electricity; and
- Conducting emergency management planning for NYPA facilities.

⁶⁷ New York ranked: 5th in 2009, 4th in 2010, and 3rd in 2011 and 2012. See <http://aceee.org/sector/state-policy/scorecard> for additional information.

8.2 OVERLAP IN ENERGY ACTIVITIES

8.2.1 CLEAN ENERGY PROGRAMS

The State has had a longstanding commitment to clean energy. NYSERDA was created in 1975 to focus on the development of energy efficiency technologies and in the 1980s, NYPA began offering energy efficiency services. Since that time, the State has significantly expanded its investment in these technologies. In 1996, the PSC established the rate-payer funded System Benefits Charge (SBC) to fund research and development activities and energy efficiency programs, including those specifically targeted at low-income customers. NYSERDA was identified as the main program administrator for these efforts. In 2004, the PSC established the RPS to address concerns with climate change and New York's dependence on fossil fuel – also through rate-payer funds administered by NYSERDA. The PSC took action again in 2007, establishing the EEPS program in response to the Governor's call to reduce electricity use 15% by 2015. Both NYSERDA and the IOUs administer the EEPS programs. In addition to the programs established by the PSC and implemented by NYSERDA and the six IOUs, LIPA initiated its own energy efficiency and renewable energy programs in the early 2000s.

As indicated, each of the State's energy agencies and authorities is involved in renewable energy and energy efficiency activities. While this may seem positive from a clean energy standpoint, there are overlaps in activities and direction that ultimately lead to hindrances in the State's clean energy efforts. The State's energy efficiency programs provide a good example of this.

Overlap in Energy Efficiency Programs

Interviews with senior management from DPS and NYSERDA illustrate significant redundancy in the administration and delivery of programs. For example, NYSERDA operates 26 of the more than 100 PSC-approved EEPS programs, of which 7 directly compete with programs administered by the State's investor-owned utilities. The preliminary investigation shows that this overlap has created marketplace confusion and, in some cases, has led to the State providing greater incentives than may be necessary. Public testimony from program participants confirms the redundancy and marketplace confusion. This was evident from the testimony provided by Dan Kartzman, President of Powersmith™ Home Energy Solutions and Co-Chair of Efficiency First New York, at the December 6th, 2012 Public Hearing of the Moreland Commission in New York City.

Mr. Kartzman participates in a number of the State's energy efficiency programs and spoke to his concern that the programs are not having the impact they could potentially have. He attributed this reduced performance to the competing entities delivering the programs. He recounted how this competition of programs has, in some cases, resulted in his company having to do multiple energy audits on the same homes and inputting the same data in the same software package multiple times, and having the homeowner sign multiple forms from multiple program administrators, all in order to access the various programs available to the homeowners. Mr. Kartzman explained that this convoluted process adds significant overhead to the cost of doing business, and in some cases the administrative hours are as great as the actual installation hours for the project. Further, Mr. Kartzman said in some cases utility "rebates" for energy-efficient appliances (*e.g.*, hot water heaters, furnaces, and boilers) are more generous and therefore encourage customers to pursue a single installation or "few measure" installations over a "whole-house" approach, even though the latter approach provides greater benefits to the consumer. In this respect, Mr. Kartzman recommended that the applicable energy efficiency programs be structured, at a minimum, to ensure that there is no competition between program administrators.

Richard Sedano, Principal and Director of U.S. Programs for the Regulatory Assistance Project, also testified at the December 6th, 2012 public hearing in New York City on the importance of both not running competing energy efficiency programs and taking measures instead to coordinate energy efficiency policies and programs statewide. Mr. Sedano was involved in the restructuring of energy efficiency programs in Vermont where 24 individual utilities had their own separately operated programs. While he did not advocate energy efficiency programs being entirely operated by either the utility sector or the government, Mr. Sedano nevertheless stressed the need to structure such programs in a manner to ensure that they not be in competition with one another.

The preliminary assessment of State energy agency portfolios shows that program delivery overlap appears primarily limited to State energy efficiency programs. By contrast, NYSERDA and LIPA are the only two entities that deliver rate-payer funded renewable energy programs, which have clearly defined geographic boundaries. Similarly, NYSERDA is the primary State entity involved in energy technology development programs. While NYPA also operates in the area of energy technology development, it collaborates with NYSERDA to ensure a coordinated approach. Electric utilities also make investments in research and development, although most of their activity in this area is operational and separate from NYSERDA's activities.

Overlap Between NYSERDA and DPS Energy Efficiency Staff

Another area of potential overlap is related to the DPS's oversight, through OEEE, of NYSERDA's implementation of the EEPS programs. As noted, OEEE is comprised of about 3 dozen people with approximately 17 OEEE full time equivalents involved with EEPS. In this oversight capacity, OEEE focuses on ensuring that NYSERDA's programs are designed to be cost effective and incorporate best practices. This is done through the monitoring of program progress and evaluation – including helping program administrators develop statements of work, select contractors, and review draft and final reports from contractors. Still, based on information obtained from interviews, this hands-on management has not led to DPS being completely satisfied with reporting from NYSERDA and other program administrators.

NYSERDA also has significant staff (~60 to 80 full time equivalents) working on EEPS programs. The Commission's preliminary investigation shows, however, that an excessive amount of staff time is spent on interactions related to OEEE's oversight function. For example, an interview with a senior manager from NYSERDA revealed that as much as 50% of staff time in the EEPS portfolio of programs is spent reporting and interacting with DPS in a regulatory setting (responding to information requests, developing and responding to petitions, drafting whitepapers, etc.). Further, NYSERDA has nine employees in its program evaluation function (although this includes programs other than EEPS) that oversee evaluation efforts by independent contractors. As part of these efforts, the independent contractors assess the quantitative impact of NYSERDA's programs and effectiveness of program delivery approaches, and present recommendations to improve the programs. OEEE is involved in many aspects of this evaluation process, including approving general evaluation plans and scopes of work on individual program evaluations, and receives draft reports from those evaluations. OEEE staff also engages an outside contractor to assist in its review of evaluation materials. There does not appear to be a need for these redundant reviews and approvals.

8.2.2 EMERGENCY PREPAREDNESS AND RESPONSE

There is also commonality between NYSERDA and DPS related to emergency preparedness and response. NYSERDA, like DPS, sits on the DPC and is involved in emergency planning and response activities, preparing its own energy emergency plan that becomes a component of the State's overall emergency preparedness plan and preparing an energy assurance plan. NYSERDA also updates its emergency plan on an annual basis. NYSERDA's plan focuses on monitoring the supply and distribution of transportation and heating fuels and

communicating such information to all relevant public officials. While there is no direct “overlap” in DPS’s and NYSERDA’s emergency preparedness and response activities, there are several nexus points that provide additional opportunities for closer collaboration. Indeed, the aftermath of Hurricane Sandy revealed the direct link between the loss of electricity resulting from utility outages (overseen by the PSC) and the disruption in the distribution of fuels (overseen by NYSERDA), particularly those distributed from marine terminals.

8.2.3 ENERGY PLANNING

The State energy planning process presents a further example of DPS and NYSERDA intersection. Pursuant to Energy Law § 6-102, NYSERDA’s president and the Chairman of the PSC both sit on the Energy Planning Board, the board responsible for developing the State’s Energy Plan. Although the board includes 12 other members,⁶⁸ in practice, DPS and NYSERDA are the main entities involved in drafting the Energy Plan – DPS from an electricity and natural gas perspective and NYSERDA from more of an all-fuels approach. Again, given the inter-relationship between fuel, other energy sectors, and utility services, this seems to be another area where greater efficiencies might be gained through closer collaboration between the two agencies with respect to preparing and implementing the State’s Energy Plan.

8.3 RECOMMENDATIONS FOR CONSIDERATION: IMPROVING STATE ENERGY PROGRAM COORDINATION

It is clear from the Commission’s investigation that overlapping functions exist in at least two of the State’s energy agencies –PSC/DPS and NYSERDA – and those overlaps reduce the effectiveness of State government. Elimination of those overlaps and streamlining some functions would allow the entities to refocus on their core missions, thereby reducing inefficiencies and waste. The process of examining any streamlining efforts should consider:

- Consultation with affected stakeholders; and
- A review of best practices from other states to ensure that the State’s reputation in providing energy efficiency leadership is maintained and enhanced, while also identifying waste and redundancy.

In light of the findings and considerations described above, a number of suggestions are offered below.

8.3.1 UNIFY POLICY-MAKING AND DIRECTION AT DPS AND NYSERDA

While DPS and NYSERDA have separate charges, they are involved in many of the same activities – implementation of the State’s clean energy programs, energy planning, and emergency response. Further, some of these activities, namely implementation of clean energy programs, appear to have diverted staff resources within DPS from core mission activities – oversight of the utilities – that may ultimately adversely impact New Yorkers during and after severe weather events that affect the electric system.

Both organizations perform unique roles that are important to maintain for a variety of reasons – for example, DPS’s utility regulation expertise and NYSERDA’s bond financing abilities and the national “brand” recognition related to support of clean energy efforts. Clearly, DPS must retain its core utility oversight responsibilities and the PSC should continue as an independent administrative body.

Uniting the energy planning and emergency preparedness and response functions of DPS and NYSERDA would allow for a single chain of command responsible for addressing fuel, energy, and utility-related aspects

⁶⁸ The Energy Planning Board is comprised of 13 voting members plus the president of the NYISO, the latter being a non-voting member.

of an emergency. There is already significant interaction between staff of both organizations in this regard, and both are part of the Critical Infrastructure and Key Resources team at DHSES where DPS serves to address utility outages and NYSERDA is responsible for the fuel supply. The aftermath of Hurricane Sandy provides strong evidence of the direct relationship between utility outages and liquid fuel supply disruptions, and the mechanisms by which both collectively can spiral out-of-control during an emergency.

In light of the findings above, the Commission makes the following recommendations for consideration:

- Having DPS and NYSERDA under a unified management structure could help to provide for greater efficiencies and coordination with respect to policy-making and direction. Under such a framework, the core functional structures of both NYSERDA and DPS could be maintained alongside one another but with common functions coordinated to achieve a more efficient and streamlined management of energy planning, policy and implementation.
- Synchronization of clean energy program administration efforts between NYSERDA and DPS could bolster both organizations' ability to meet core functions.
- A single office of combined NYSERDA and DPS staff related to energy markets, policy and planning, and emergency response, could help provide for a more unified and coordinated approach and more effective implementation of these activities. This might also allow for streamlining of the energy planning and policy-making process, for which further consideration is necessary by the State to ensure an efficient and productive process.
- The PSC should clearly delineate responsibilities between NYSERDA and the utilities with respect to energy efficiency activities to reduce program redundancy, overlap and inefficiencies that may reduce the overall effectiveness of the State's energy efficiency efforts.

8.3.2 NYPA

NYPA's energy efficiency and renewable energy programs are fundamentally different from those implemented by the IOUs and NYSERDA. NYPA's programs are only available to eligible program participants as defined under NYPA's enabling statute. The statute outlines NYPA's authority to carry out energy efficiency projects for public entities such as those in New York City and Westchester county, State, county and municipal governments elsewhere in the State and community colleges and public schools. NYPA's programs provide turn-key service to its customers including audit, design, construction and financing.

As a result of NYPA's strong balance sheet, it is able to offer upfront, low-cost financing to these entities. In the best of times that is an advantage. In times of shrinking resources, it is perhaps the only way for these participants to avail themselves of cost-effective energy efficiency opportunities. Further, NYPA recovers its investment through customer bill savings usually within ten years, so out-of-pocket costs are kept to a minimum.

NYPA's programs are unique. NYPA has extensive experience dealing with the public sector and has built up vast expertise in implementing energy efficiency projects in this sector. NYPA staff has the relationships and knowledge necessary to complete these projects in an expeditious and cost-effective manner. NYPA's history of implementing energy efficiency is an excellent one and it is for these reasons that the Commission recommends the NYPA's energy efficiency programs continue to operate in the current fashion. However, in an effort to better harmonize all of the State's energy efficiency initiatives, the Commission recommends that NYPA continue its coordination with NYSERDA and the utilities and look for additional opportunities to maximize resources, reduce overlap and insure consistency of initiatives and results.

9 CONCLUSION AND NEXT STEPS

Due to the urgent need to address the dysfunctional provision of power to the LIPA service area and the serious shortcomings in the PSC's authority over and regulation and auditing of electric utilities, especially with respect to utility storm preparedness and response, the Commission recommends that the Governor and Legislature weigh the findings and considerations set forth in the Interim Report and take appropriate action.

As stated earlier, the Commission intends to focus the second part of its investigation on the storm preparation and response of the State's six IOU's relative to the Recent Storms. To this end, the Commission will hold additional public hearings and interview utility personnel as deemed necessary to provide a more complete understanding of the IOUs' actions before, during and in the aftermath of the Recent Storms.

The Commission looks forward to issuing its final report in the Spring of 2013.

10 APPENDIX

10.1 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.

10.2 EXECUTIVE ORDER

Executive Order 73 establishing the Commission is below.

E X 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

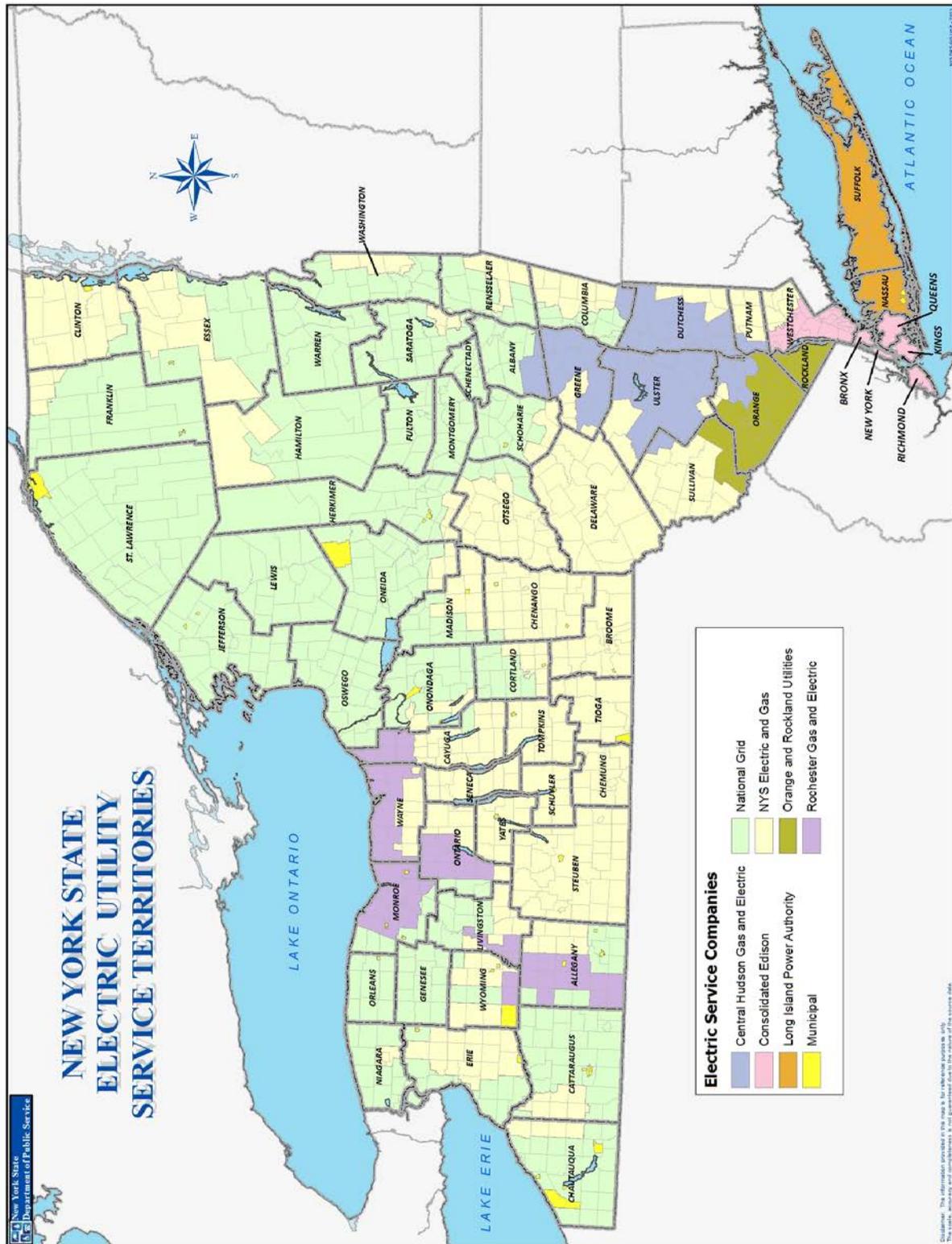
Secretary to the Governor

10.3 MORELAND COMMISSION AUTHORITY

The Moreland Act was enacted into law in 1907 (§ 6 of the New York State Executive Law). It authorizes the governor to examine and investigate the management and affairs of any department, board, bureau or commission of the State. The Commission is empowered to subpoena documents, administer and examine witnesses under oath, and hold hearings.

Under authority derived from the Moreland Act, this Commission has been empowered to investigate, among other things, the emergency preparedness and response of utilities during and following emergency weather events, the adequacy of existing laws, rules and regulations and the existing legal and regulatory framework of the jurisdictions, responsibilities and missions of the State's energy agency and authorities.

10.4 NEW YORK STATE ELECTRIC UTILITY SERVICE TERRITORIES



10.5 ACRONYMS

<i>Acronym</i>	<i>Definition</i>
ACEEE	American Council for an Energy Efficient Economy
CARES	Computer Assisted Restoration of Electric System
DHSES	New York State Department of Homeland Security and Emergency Service
DPC	New York State Disaster Preparedness Commission
DPS	New York State Department of Public Service
EEPS	Energy Efficiency Portfolio Standard
EMA	Energy Management Agreement
ERIP	Emergency Response Implementation Plan
ETR	Estimated time for repair
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FTE	Full-time equivalent
GIS	Geographic information systems
IOU	Investor Owned Utility
KSE	Keyspan Electric Services LLC
LILCO	Long Island Lighting Company
LIPA	Long Island Power Authority
MSA	Management Services Agreement
NG	National Grid
NOAA	National Oceanic and Atmospheric Administration
NYISO	New York Independent System Operator
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
OMS	Outage Management System
OSA	Operation Services Agreement
PACB	Public Authorities Control Board
PSC	New York State Public Service Commission
PSE&G	Public Service Electric & Gas Company
PSEG	Public Service Enterprise Group
RFP	Request for proposals
RG&E	Rochester Gas and Electric
RGGI	Regional Greenhouse Gas Initiative
RPS	Renewable Portfolio Standard
SAC	Sub-station area coordinator

<i>Acronym</i>	<i>Definition</i>
SBC	System Benefits Charge
SEO	New York State Energy Office
SERP	Storm Emergency Response Policy
SLOSH	Sea, Lake and Overland Surges from Hurricanes
T&D	Transmission and distribution