NEW YORK STATE OF OPPORTUNITY. Department of Public Service

Department of Public Service
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April 15, 2015

Sent Electronically & US Mail

Ralph V. Suozzi, Chairman
Long Island Power Authority
333 Earle Ovington Blvd.
Uniondale, NY 11553

Dear Chairman Suozzi:

Please find herein the recommendations of the New York State Department of Public Service (DPS or Department) concerning PSEG Long Island, LLC's (PSEG LI) first annual Long Range Plan (Utility 2.0 Plan or Plan). The recommendations are provided pursuant to the LIPA Reform Act (LRA) and are consistent with the Amended and Restated Operating Service Agreement (OSA) between LIPA and PSEG LI. Passage of the LRA signaled New York State's recognition that the status quo for Long Island electric service was no longer acceptable. It also confirmed New York State's commitment to a cleaner, more reliable, and more resilient customer-centric electric system. In order to fulfill those policy objectives, the electric system *and* the electric utility business model must evolve and modernize. To that end, the OSA included a requirement that PSEG LI submit an annual long range capital and operating plan (to be known as the Long Range Plan) to move Long Island's electric transmission and delivery system toward a modern, customer centric model.

Specifically, the Utility 2.0 Plan is intended to provide PSEG LI customers with tools to manage their energy usage and utility bills more efficiently and effectively, and improve system reliability and power quality.[1] In its Utility 2.0 Plan, PSEG LI points to the specific goals of reducing peak demand and improving the efficiency and resiliency of the electric grid. The Utility 2.0 Plan also identifies immediate reliability challenges on the Long Island electric grid that could be addressed through market animating programs and new technologies, rather than traditional infrastructure deployment. PSEG LI has also offered a menu of program ideas including direct load control, energy efficiency, distributed generation and advanced metering infrastructure, which the company posits will enhance the customer experience, contribute to clean energy policy goals, and cost-effectively defer the need for more traditional utility infrastructure deployment. Lastly, PSEG LI has requested that it be paid fees and incentives to implement the Utility 2.0 Plan.

[1] PSL §3-b(3)(g).

The DPS commends PSEG LI for its thoughtful approach towards identifying opportunities to modernize the electric system in a manner that will yield economic and environmental benefits for Long Island. Since PSEG LI developed its plan, a number of intervening events and additional information and concepts have developed through the statewide Reforming the Energy Vision (REV) proceedings, and are informing the DPS's opinions and advice. As discussed more fully below, the DPS recommendations fall within one of three categories: i) programs or actions that should commence immediately as mechanisms to address longer term requirements for Long Island; ii) programs or actions that appear to have merit but require additional consultation and development; and iii) collaborative initiatives and related activities not included in the original filing, that PSEG LI should pursue or continue to pursue in developing its Integrated Resource Plan and otherwise working towards Statewide energy policy objectives.[2]

Background

As the New York State Public Service Commission (PSC or Commission) recently observed in its REV proceeding, the energy industry is experiencing dramatic change.[3] The State is responding to these changes by developing and supporting opportunities for investment in New York's utility infrastructure and the State's burgeoning green economy. New York has already begun a number of notable and innovative approaches to address the challenges of climate change and aging infrastructure, while concurrently improving reliability, customer choice, and the value and security of the energy system. New York's initiatives include creation of the nation's largest Green Bank, launch of the NY-Sun solar initiative, the multi-agency Charge NY program to support expanded adoption of electric vehicles, BuildSmart NY to retrofit public buildings statewide, and the multi-state, market based Regional Greenhouse Gas Initiative.[4]

The Commission's REV proceeding announced the State's intention to consider comprehensive changes to the utility regulatory paradigm and the structure, interaction and operation of retail and wholesale markets in relation to achieving specific policy objectives. The Commission's objectives under REV are:

1. Enhanced customer knowledge and tools that will support effective management of total energy bills.
2. Market animation and leverage of ratepayer contributions.
3. System wide efficiency.
4. Fuel and resource diversity.
5. System reliability and resiliency.
6. Reduction of greenhouse gas emissions.

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2 PSEG LI has been participating in a number of activities related to the Public Service Commission's Reforming the Energy Vision proceeding.

3 Case 14-M-0101, Proceeding in Regard to Reforming the Energy Vision, Order Adopting Regulatory Policy Framework and Implementation Plan (issued February 26, 2015) ("[t]he electric industry is in a period of momentous change. The innovative potential of the digital economy has not been accommodated within the electric distribution system. Information technology, electronic controls, distributed generation, and energy storage are advancing faster than the ability of utilities and regulators to adopt them, or to adapt to them." p. 1.)

4 Governor Andrew M. Cuomo, 2015 Opportunity Agenda, State of the State, pages 131-153.

Amendments to the Public Service Law effectuated by LRA require the DPS to review and make recommendations concerning any plan proposed by PSEG LI for the implementation of energy efficiency measures, distributed generation and or related programs intended to modernize the electric grid; provide customers tools to manage their energy usage and utility bills; and improve system reliability and power quality.[5] The Department also reviews PSEG LI's proposed annual capital expenditures and the emergency response plan.[6]

The OSA[7] is the contractual agreement under which PSEG LI provides management and operation services for LIPA's electric transmission and distribution (T&D) system.[8] The scope of services provided by PSEG LI under the OSA includes a long range capital and operating plan to improve LIPA's T&D system.[9] The OSA also specifies that the Utility 2.0 Plan should be designed to achieve a number of objectives, including increased flexibility regarding customer sited distributed energy resources; system wide affordability benefits; and improved service, reliability and resiliency. The OSA requires PSEG LI to incorporate cost effective programs to reduce or defer significant traditional T&D capital expenditures and to smooth peak demand, and incorporate cost effective advanced power controls for T&D facilities, technology based energy efficiency and load management programs, real time power monitoring equipment, and integrated communications systems. Further, the OSA calls for PSEG LI to identify portions of the T&D system where alternative energy providers, including PSEG LI's unregulated affiliates, could offer customers value-added services.

The OSA provides for a service fee to compensate PSEG LI for: i) senior management wages and benefits; ii) corporate overhead costs; and iii) management services profit. The service fee consists of a fixed component and a variable incentive component. The incentive component is based on PSEG LI's performance related to customer satisfaction, technical and regulatory performance[10] and financial performance. Further, the OSA affords PSEG LI the opportunity to propose to LIPA capital investments to be made and owned by PSEG LI or its affiliates (PSEG) if the investments are within the OSA scope of services; are expected to result in meaningful reduction in customer energy usage and overall energy costs on Long Island; and would not in any manner jeopardize the tax exempt status of LIPA's bonds, violate its bond resolutions or covenants or violate its local franchise agreements.[11] Should LIPA accept any capital investment proposed by PSEG, the structure and allowed rate of return related to such investment will be subject to mutual agreement.

The OSA also provides for a public participation and comment process regarding the first annual Utility 2.0 Plan, and in July 2014, PSEG LI submitted to the DPS its first annual Utility 2.0 Plan. Public participation included an open comment period, two technical conferences open to the public and seven

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5 PSL §3-b(3)(g).

6 PSL §3-b(3)(b) and (c).

7 See the "Amended and Restated Operations Services Agreement between Long Island Lighting Company d/b/a LIPA and PSEG Long Island LLC" dated December 31, 2013 and related appendices, available at http://www.lipower.org/papers/agreements.html.

8 PSL §3-b(2)(c).

9 See OSA § 4.2 (A)(5) Utility 2.0.

10 Including performance related to safety, reliability, environmental and other regulations.

11 See OSA § 4.2 (A)(7) Optional Capital Additions and Appendix 8 which provides an illustrative list of the types of investments contemplated.

DPS held public statement hearings each preceded by an information session. In response to stakeholder and DPS input, PSEG LI submitted an updated Utility 2.0 Plan on October 2014.[12]

In December 2014, LIPA approved its 2015 operating and capital budgets. The approved budgets hold delivery rates at 2013 levels and provide for $445.5 million for PSEG LI operating expenses to cover a number of expense categories, including $83.9 million for the Efficiency Long Island program and other programs. A total of $2.0 million was included in the operating budget for the development of Utility 2.0 competitive solicitations. Also contemplated was an additional $13.3 million mostly related to the proposed direct load control expansion, and $3.9 million for Advanced Metering Infrastructure (AMI) as a projection of the cost to deploy a limited number of smart meters and an Island-wide communications network that would act as a backbone for and facilitate the future deployment of AMI functionalities. Both of these programs are subject to a review and recommendation by DPS and subsequent LIPA Board approval.

On January 30, 2015, PSEG LI submitted its three year rate plan for 2016 through 2018.[13] Details concerning sales and revenue impacts and proposed cost recovery requirements related to Utility 2.0 for 2016-2018 are expected to be considered in the ongoing rate case.[14]

DPS Recommendations

PSEG LI identifies in its Utility 2.0 Plan approximately 10 separate project areas or programs that it believes will provide a foundation for the further modernization of LIPA's transmission and distribution system, while addressing pressing system needs in a modern, market-based, customer-centric approach.

The underlying premise of the Utility 2.0 Plan filing is to identify environmentally and economically cost effective and sustainable alternatives to traditional approaches of developing and operating the power system for Long Island, including alternatives provided by a competitive market. For this to be successful, it is essential that PSEG LI thoroughly evaluate future system requirements so that the most cost effective approach to meeting them can be determined. In this way we can be assured that the activities undertaken to implement the Utility 2.0 Plan will best achieve the objective of a reliable, cost effective and environmentally sustainable system for Long Island. This information will be developed through both the integrated resource planning process and the rate case. Consequently, it is critical that all Utility 2.0 Plan activities are based on currently known requirements, are cost-effective mechanisms proven to meet consumer needs, or are foundational activities that will support the development of third party energy investments that will benefit and not financially burden Long Island consumers. The Department's recommendations are provided within that context.

We commend PSEG LI in its efforts to align its Utility 2.0 Plan proposal with REV. Aspects of the proposed Plan clearly provide an opportunity and challenge for PSEG LI to demonstrate how new technologies and market based alternatives can provide cost-effective solutions for reliability challenges that were satisfied historically through reliance on centralized power plants and traditional grid

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12 Available at: http://www.dps.ny.gov/longisland/PSEG LI_Utility_Plan_October_Update.html.

13 See Matter 15-00262, Three-Year Rate Proposal for Electric Rates and Charges Submitted by the Long Island Power Authority and Service Provider, PSEG Long Island LLC.

14 See Matter 15-000262, supra, Direct Pre-Filed Testimony of PSEG LI Utility 2.0 and Energy Efficiency Panel.

infrastructure. At the same time there are aspects of specific programs that need further development and/or justification before PSEG pursues implementation. For these activities, the DPS recommends that PSEG LI continue to work with DPS staff to further develop plans and approaches. In addition to working with the DPS, we recommend PSEG LI renew and expand its efforts to include the citizens of the communities where these activities and programs could take place. Community education and early outreach with officials and ratepayers are crucial to creating the customer benefits contemplated by the LRA and OSA.

Finally, there are some foundational activities that PSEG can and should undertake immediately in the context of participation in the ongoing REV proceedings. In recognition of these limitations and the approved levels in the 2015 budget, DPS makes the following recommendations as part of its annual review of PSEG LI's Utility 2.0 Plan.

A. Programs for Immediate Implementation

T&D Deferral

The OSA contemplates that PSEG LI will incorporate cost effective programs to reduce or defer traditional T&D capital expenditures and to smooth peak demand.[15] PSEG LI accordingly proposes to address high-priority load pockets on the Long Island system in Montauk, Far Rockaway, and Glenwood with market-based, innovative solutions. PSEG LI indicates that the RFPs it proposes, if successful, will result in deferring the need for traditional T&D investment.

PSEG LI's proposals for broad based RFPs seeking innovative and less costly solutions appear to align well with its obligation in the OSA to incorporate cost effective programs to reduce or defer significant traditional T&D capital expenditures and to smooth peak demand. The T&D deferrals are also consistent with many of the REV objectives, including using DER to spur market innovation and improve system wide efficiency. Therefore, DPS recommends that PSEG LI begin developing and issuing solicitations to solve these grid challenges immediately. PSEG LI should collaborate with DPS staff in order to incorporate experience from Consolidated Edison Company of New York, Inc.'s (Con Edison) Brooklyn/Queens Demand Management Program and Orange and Rockland Utilities Inc.'s Pomona Load Pocket Demand Management Pilot. Consistent with those projects, the solicitations should identify problems and seek ideas and proposals to address them. The solicitations should not prescribe solutions or provide specifications that in effect predetermine solutions. Likewise, the desires and concerns of the communities hosting the T&D deferral projects should be part of both shaping the solicitations as well as evaluating the potential options.

Development and administration of the solicitations can be funded from the 2015 LIPA approved budget.[16] Additional funding for actual deployment of solutions should be considered within the 2016-2018 rate case and the proposed capital budget. Funding for capital expenditures to address the load pockets would be repurposed in part to pay for the Utility 2.0 Plan alternatives. Results of the solicitation processes,

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[15] See OSA Section 4.2 (A)(5)(a).

[16] The $2.0 million allocation included development costs for a number of programs that DPS recommends do not go forward at this time, while the cost of certain solicitations was to be funded through PSEG LI's Power Markets budget. Therefore, PSEG LI should detail its use of these funds to DPS Staff.

the PSEG LI ongoing rate proceeding, and forthcoming Integrated Resource Plan will ultimately inform the details of these programs, including implementation and cost recovery methods. DPS recommends that PSEG LI work closely with DPS staff to develop a robust solicitation process.

Direct Load Control

Long Island's electric system has a 44.5% utilization rate (load factor), indicating that it has more than 6,000 MW of electric capacity available to supply, on average, less than 2,700 MW of demand. While load growth in most areas of Long Island has moderated in recent years, continued development on the South Fork is causing sustained load growth. Further, this part of the Island has sparse transmission and distribution infrastructure. Addressing this load growth intelligently and efficiently can improve the overall system and lower costs related to summer peak demand.

PSEG LI proposes that $106 million be allocated to update and expand the existing LIPAEdge direct load control program in order to save 125 MW of peak demand. The proposal consists of replacing outdated equipment in the existing air conditioning and pool pump cycling program and expanding the program to include additional participants. This type of program has been demonstrated to be effective and PSEG LI should continue the existing program through the summer of 2015 in order to maintain the peak reduction benefits it can provide. PSEG LI should also propose immediate improvements to its existing program and other demand response programs this summer that are consistent with State efforts and that can be covered under the existing budgets approved by LIPA for 2015. Expansion or modification of the program, beyond what is currently budgeted for in 2015, should be considered as part of the ongoing rate proceeding. Further analysis is required to, for example, compare PSEG LI's direct load control program to a similar program administered by Con Edison and to consider how such programs may reduce capacity costs on Long Island. In collaboration with DPS staff, PSEG LI should incorporate program features that improve flexibility for participants, including "bring your own thermostat" initiatives, an increase in market animation, the use of advanced technologies, and the improvement in appropriate pricing signals.

B. Programs and Actions for Further Development

Advanced Metering Infrastructure ("AMI")

PSEG LI has proposed a significant deployment of AMI in the rate proceeding, and has indicated in the context of the Utility 2.0 Plan that more real-time retail pricing to accompany the deployment anticipated in Utility 2.0 Plan is not presently available due to billing system and rate design limitations. Accordingly, DPS intends to evaluate PSEG LI's proposed AMI deployment in the 2016-18 rate case. The rate proceeding provides the DPS with an opportunity to engage in a comprehensive analysis of the costs and benefits of the proposed AMI deployment.

In addition, the role and the particular functionality AMI should provide are also being reviewed on a statewide basis by the REV Market Design and Technology Platform (MDTP) working group. DPS recommends that PSEG LI comply where appropriate with any subsequent recommendations from this effort. In the meantime, DPS recommends that the LIPA Board approve PSEG LI proceeding with its 2015 AMI capital plan to deploy an Island-wide communications network that would act as a backbone for and

facilitate the future deployment of AMI functionalities. DPS recommends that any costs for the AMI network or subsequent REV recommendations that exceed approved budgets be considered in the pending rate case.

Other Proposed Programs

PSEG LI proposed a number of other programs in its Utility 2.0 Plan.[17] While many of the general concepts provided may be meritorious, compelling justification for recommending those programs to move forward at this juncture is lacking. While PSEG LI analysis indicates that the programs generally pass cost benefit analysis, DPS is not in a position to recommend at this time whether those programs will meet the goals and objectives stated in the OSA. Results of the T&D solicitation process recommended above and the pending rate case, as well as consideration of the more holistic approach expected in the Integrated Resource Plan and REV proceeding, will allow better and more focused program development that minimizes top down program design and maximizes market animation features.

C. REV Collaborative Initiatives and Related Activities

PSEG LI should continue to participate in the activities of those groups and the REV proceeding in general. Further, DPS recommends that PSEG LI initiate or continue the specific REV and market animation related activities described below.

Demonstration Projects

As part of its REV proceeding, the Commission issued a Memorandum and Resolution on Demonstration Projects which encourages utilities and third parties to begin to develop demonstration projects.[18] The resolution provided a number of guidelines regarding demonstration projects and the REV Track One order directed filing of initial demonstration project consistent with the guidelines by July 1, 2015. DPS recommends that PSEG LI work with DPS staff to develop demonstration projects appropriate for Long Island along the same schedule. A proposal for appropriate funding of demonstration projects should also be developed. Such proposal should seek to fund demonstration projects from the existing approved 2015 budgets. Ongoing costs associated with demonstration projects should be considered in the 2016-2018 rate case.

PSEG LI should include partners willing to contribute private capital as part of the development of demonstrations. The demonstrations should propose specifically what portion of projected capital needs will be borne by all ratepayers, and what portion will be provided by market participants. Demonstrations should include opportunities for third parties to demonstrate how various rate designs, information sharing,

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[17] E.g., **Residential Energy Customer Engagement -** proposed that energy-use benchmarking data be targeted at 500,000 customers via various media, including text and Internet.
Hospital Energy Efficiency- proposed a program that would provide investment grade audits, project management, cost sharing, and on-bill financing for energy efficiency projects at hospital facilities.
Geothermal and CHP - proposed increasing the incentives for these technologies.
Electric Vehicle Charging Stations - proposed to include workplace charging stations and smart charging equipment for business customers.

[18] Case 14-M-0101, supra, Memorandum and Resolution on Demonstration (issued December 12, 2014).

adjusted standby tariffs, and other approaches can be developed to benefit consumers, encourage customer participation, and achieve our shared efficiency and bill management objectives. PSEG LI and third-party providers should also consider demonstrations that use advanced distribution systems, including two way communications, real time operation of dynamic load, and other system technologies that support awareness, flexibility and efficiency as tools that support greater penetrations of DER, including solar, without compromising system reliability. Customer engagement and measuring customer response to DER and data sharing will be a valuable element of these demonstrations.

Although we anticipate that the majority of the DER will be customer-owned and operated, PSEG LI proposed that some DER, such as the proposed battery storage solutions, could be owned, operated, or maintained by PSEG LI. To accelerate the implementation of demonstration projects, we recommend allowing PSEG LI or its affiliates to propose making investments competitive with those provided by third parties in DER assets that are connected to the system, consistent with the guidelines in the PSC's Track 1 Order[19] for utility ownership of DER, subject to the limitations discussed below.

Working Group and Collaborative Efforts

Staff has convened the MDPT to identify the necessary functional and business architecture to support greater penetrations and operational use of distributed energy resources and two additional working groups, Market and Tariff Development and Contract Group are being formed to continue the preliminary efforts of the MDPT.[20] The REV Track One Order also directed a number of specific activities for the short, medium and long term as described below.

The Commission directed Staff to initiate a process to change the applicability threshold of the Standardized Interconnection Requirements to 5 MW (from 2 MW) in consultation with utilities and other interested parties.[21] The Commission also directed creation of an online application portal, with management and screening, including necessary impact studies occurring automatically with a response delivered to the customer in a timely manner. As a secondary step, the Commission directed that the automatic application process be integrated into grid optimization planning. PSEG LI should participate in this process and modify its interconnection process and practices, if necessary, to mirror that of the SIR.

The Contract working group is charged with developing standardized contract terms for projects that do not currently have them. The uniform contract terms and procedures will expedite interconnection agreements and provide simplicity and certainty to DER developers regardless of the specific service territory in which a project may be located. Interconnection agreements for LIPA's T&D system should also be uniform to the extent practicable.

Other Market Development/Utility Modernization Actions

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19 See Footnote 3 above.

20 Case 14-M-0101, supra, Order Adopting Regulatory Policy Framework and Implementation Plan (issued February 26, 2015) p. 41-42.

21 Id.

As part of its Integrated Resource Plan development, PSEG LI should include plans to conduct resource studies and to otherwise better comprehend what is needed to support and encourage increasing DER into its system and in turn, to optimize integration of those resources into overall system planning. At a minimum, PSEG LI should conduct an analysis to determine potential technical barriers to and solutions to solar and DER deployment, as well as analyze load shifting/off-peak load development and the benefits such practices can provide the Long Island T&D system. Moving forward, there are significant policies and technologies that could benefit Long Island, particularly as it relates to decreasing summer peak load.

PSEG LI Investment and Incentives

Pursuant to the OSA, PSEG LI is obligated to endeavor to implement Utility 2.0 plans, while providing it the opportunity to propose to LIPA capital investments - to be owned by PSEG LI or its affiliates and subject to a reasonable rate of return.[22] The DPS believes that there may be opportunities where Long Island consumers will benefit from PSEG LI's willingness to invest in resources that LIPA itself would not invest in and can help further market development. At the same time, as the PSC observed in the REV proceeding, if not carefully managed, this opportunity to invest could have an adverse impact on market development. The DPS is also aware that there are tax related constraints on payments that LIPA can make to PSEG LI and on the use of LIPA's tax-exempt utility property by for-profit third parties. Due to these factors, the DPS recommends avoiding a rigid approach towards PSEG LI capital investments under the OSA. Rather, the DPS recommends that to the extent PSEG LI identifies investment opportunities, that it present them to the DPS and LIPA to be looked at on a case by case basis, subject to all of the following considerations:

a. The investment is one that LIPA would not or cannot make itself, from a risk perspective and is either not suitable for competitive procurement or PSEG LI has been selected through a competitive procurement;
b. The investment is consistent with the principles of REV, will support new business models and is being proposed in conjunction with a demonstration project that helps advance such business models;
c. The fee basis for the investment is fair and reasonable, and does not impose adverse financial consequences to LIPA or its customers.

Timing of Annual Utility 2.0 Plan Updates

Given the ongoing rate case is not expected to close until the Fall of 2015, and given the IRP process will be continuing throughout 2015, we recommend that LIPA agree to postpone the annual submission date for the 2015 Utility 2.0 Plan established in the OSA from July 1, 2015 to December 31, 2015. This will ensure that the various planning and budgeting processes are appropriately aligned to inform the next update of the Utility 2.0 Plan.

Conclusion

[22] OSA, p. 23.

There are clear short-term opportunities where Utility 2.0 approaches, demonstrating advanced technologies and business models, can be used to meet local reliability needs on the Long Island electric grid. As discussed above, these approaches should be pursued through competitive solicitations that attract the best and most cost effective ideas. PSEG LI is currently in the midst of important system planning through its Integrated Resource Plan and simultaneously undergoing the first rate case on Long Island in many years. These processes will inform future Utility 2.0 Plans, and the DPS looks forward to continuing its work with PSEG LI and LIPA to continuously improve system efficiency and integrate clean energy solutions on Long Island in concert with the ongoing REV proceeding.

Sincerely,

Audrey Zibelman
Chief Executive Officer

cc: David Daly
John McMahon