



October 21, 2014

VIA ELECTRONIC MAIL

Hon. Kathleen Burgess
Secretary to the Commission
New York State Public Service Commission
Empire State Plaza
Agency Building 3
Albany, NY 12223-1350
Email: secretary@dps.ny.gov

RE: Matter No. 14-01299; In the Matter of PSEG-LI Utility 2.0 Long Range Plan-Comments of Sierra Club, the Natural Resources Defense Council, Environmental Advocates of New York, Renewable Energy Long Island, the Pace Energy and Climate Center, National Wildlife Federation, the Alliance for Clean Energy New York, and Citizens Campaign for the Environment

Dear Secretary Burgess:

The Sierra Club, the Natural Resources Defense Council, Environmental Advocates of New York, Renewable Energy Long Island, the Pace Energy and Climate Center, National Wildlife Federation, the Alliance for Clean Energy New York, and Citizens Campaign for the Environment (“Joint Commenters”), respectfully submit the following comments regarding the updated PSEG-Long Island Utility 2.0 Long Range Plan (“Updated Plan”) filed by PSEG-Long Island (“PSEG-LI”) on October 6, 2014.¹ Taken as a whole, the Updated Plan’s additions of \$130 million in funding and 65 MW of energy savings are laudable and directionally consistent with the objectives of the ongoing statewide Reforming the Energy Vision (“REV”) proceeding and with the State’s greenhouse gas goals. The Joint Commenters applaud PSEG-LI for

¹ PSEG-LI has indicated to the Joint Commenters that it will merge the Original Plan and Updated Plan into a Final Plan to be released sometime in November.

expanding its existing initiatives as well as adding utility-scale solar investments, a 5 MW battery storage project, and an electric vehicle charging infrastructure program. However, because many of the Joint Commenters' original comments were not addressed by the Updated Plan, the following comments reflect Joint Commenters' recommendations for further improvements to be included in the Final Plan.

I. Comments

1. The Final Plan Should Include the Reduction of Carbon Emissions as One of its Key Objectives and Correct Its Estimate of Carbon Dioxide Reductions

The Joint Commenters applaud the Updated Plan's inclusion of estimated carbon dioxide (CO₂) reductions associated with the Plan's initiatives. However, the use of an LM-6000 oil-fired peaker skews those reductions, since that plant would only be operated during peak demand. Instead, the Final Plan should calculate CO₂ reductions using peak generation for peak demand initiatives, and baseload generation for total demand reduction programs. PSEG-LI should also provide more detail on the CO₂ emission reduction calculations showing which emission rate and measure was assumed for each program.

Furthermore, in keeping with the objectives of REV and Governor Cuomo's carbon reduction goals, the Final Plan should add the reduction of carbon emissions as one of its key objectives. To track progress, the Plan should establish CO₂ emission targets with 5-year milestones and also include transparent performance metrics for measuring carbon reductions as PSEG-LI continues to modernize the electric system on Long Island. These metrics could include a mass-based carbon metric in the form of absolute tons of CO₂, a system average emission rate (pounds per megawatt hour of CO₂), distributed energy resource adoption and market penetration, and renewable energy generation and energy efficiency savings targets.

2. The Final Plan's Goal of Improving System Efficiency Should Be Balanced with a 2% Annual Energy Savings Goal

The Joint Commenters are concerned that PSEG-LI's statement that "the ultimate goal of this Utility 2.0 Plan is to reduce peak demand, which will improve the efficiency and resiliency of the power system" is incomplete.² While we agree that improving system efficiency is an important consideration from a cost and emissions perspective, particularly on Long Island with its unique locational capacity requirements, we urge PSEG-LI to pursue a more balanced approach that avoids an overemphasis on peak reduction (MW) to the detriment of overall demand (MWh) reduction. For example, if the "tails" of Long Island's load curve are raised to a greater degree than the peak is lowered, it would result in an improved system efficiency percentage, but (based on the current power supply portfolio) also increased emissions and greater overall electric demand.

This is why we support the Final Plan's inclusion of an annual goal of 2% increase in overall energy savings, which is achievable as demonstrated by states with best practices in

² Updated Proposal, 2.

place³ and the Plan's targeted investment in affordable multifamily housing. As the original Plan acknowledged, "[i]mproving the energy efficiency of end use equipment (e.g., lighting, air conditioners, chillers and other equipment) can be the most cost-effective energy resource and provide significant savings for customers."⁴ To this end, we urge PSEG-LI to retain the original Plan's proposed \$13 million energy efficiency expansion to the Rockaways, which the Updated Plan would reduce to only \$5 million. PSEG-LI is well-positioned to address this issue, given its nationally recognized multifamily program in New Jersey,⁵ and maintaining the original \$13 million recognizes the benefits of serving low-income multifamily buildings.

3. The Final Plan Should Discourage Further Investment in Fossil-Fuel Generation by Improving LIPA's Renewable Portfolio

As evidenced most recently by PSEG-LI's decision that the proposed Caithness II power plant will not be needed, we applaud the Updated Plan's goal to "defer the need for transmission and peaking capacity on the South Fork."⁶ By obviating the need for these upgrades and capacity, the Updated Plan will save Long Island ratepayers approximately \$300 million in unnecessary transmission and substation costs.⁷ However, the Plan's design options for the South Fork still include the potential addition of 125 MW in new peaking fossil-fuel generation.

The Final Plan should instead maximize the potential for renewable energy, energy storage, and energy efficiency programs to defer or eliminate the need for these peaker plants (as much of the rest of the Plan appropriately does). Proposed renewable and energy storage projects for the South Fork include a 210 MW offshore wind farm,⁸ at least 60 MW of utility scale PV projects, and 25 MW of 12 hour battery storage (which could provide 75 MW over 4 hours). Given the abundance and availability of renewable energy, energy storage and efficiency initiatives, complementing antiquated fossil-fuel infrastructure with additional fossil-fuel infrastructure is contrary to the Plan's goal to displace generation expansion by accelerating investments in renewable energy and energy efficiency.

Furthermore, when compared to continued fossil-fuel investments with uncertain long-term costs, utilizing and expanding these proposed programs also appears to be the lower cost option. Based on avoided cost of new capacity and energy as laid out in the Updated Plan, the approximate average cost of power from new peakers over 20 years could be between 40 ¢/kWh (using NYISO Avoided Cost figures)⁹ and 62 ¢/kWh (using PSEG-LI's Avoided Cost figures)¹⁰. The price for solar electricity under LIPA's CSI II is 16.88 ¢/kWh and guaranteed for the 20 year duration of the Power Purchase Agreement. Offshore wind power is expected to come in at around the same price. These cost-effective investments are amplified by complementary reductions in air pollutants directly linked to negative health outcomes that drive up costs and harm the local economy.

³ <http://www.nrdc.org/energy/scaling-up-energy-efficiency.asp>

⁴ Original Plan, 1-1.

⁵ <https://www.pseg.com/info/media/newsreleases/2013/2013-03-27.jsp>.

⁶ Updated Plan, 20.

⁷ Original Plan, 3-29.

⁸ Based on NYISO rules, Deepwater Wind's proposed 210 MW offshore wind farm will provide 85 MW of NYISO-qualifying capacity to the South Fork load pocket during the summer, and 125 MW during the winter.

⁹ Original Plan, A-11.

¹⁰ Original Plan, A-3.

There is also broad public and political support for clean energy investment for the South Fork, as evidenced by the recent passage of the East Hampton Town resolution committing to 100% renewable electricity by 2020. In order to meet the town's goal, East Hampton residents support localized energy sources, energy storage, solar and utility-scale offshore wind. Importantly, utilizing this mix of distributed solar, offshore wind, energy storage, and efficiency and demand response measures for the South Fork would serve as the perfect prototype and opportunity to implement/actualize the vision outlined by the state-wide REV initiative.

For all of these reasons, Joint Commenters strongly urge PSEG-LI to abandon the proposal for 125 MW of proposed fossil peakers for the South Fork in favor of cleaner, more cost-effective, and readily available alternatives that can provide the needed reliability and voltage support without the pollution and other environmental impacts. National Grid's May 2013 retirement of 6 MW of heavily polluting oil peakers in Montauk was a step forward for air quality on the East End; building out more such facilities would be a step back.

4. To Maximize Cost-Effective Solar PV, the Final Plan Should Retain the Original Plan's Commercial Solar PV Program

The Joint Commenters commend the Updated Plan's addition of 20 MW in long-term PPAs for utility-scale solar PV projects. However, we do not agree that this addition should come at the expense of 20 MW in behind-the-meter commercial scale PV systems, which were reduced from 30 MW to 10 MW by the Updated Plan. In order to avoid balkanization of the market and maximize cost-effective PV deployment under Governor Cuomo's NY-Sun program, the Final Plan should restore the Original Plan's commercial solar goal of 30 MW. PSEG-LI should continue to closely coordinate with NYSERDA to ensure this program is consistent with NYSERDA's competitive (and soon to be declining MW block) PV program while tailoring it to reflect Long Island's unique market characteristics and system needs.

For future solar PV solicitations, we also encourage PSEG-LI to utilize multiple solicitations over a period of time, rather than a single solicitation. With increased and periodic solicitations, solar developers will be offered greater opportunity to amortize overhead and fixed costs over a series of projects. The creation of consistent, predictable and repeated market opportunities over a sufficient period of time will help drive cost reductions and provide market participants greater certainty for investing resources in Long Island's solar market for the long-term.

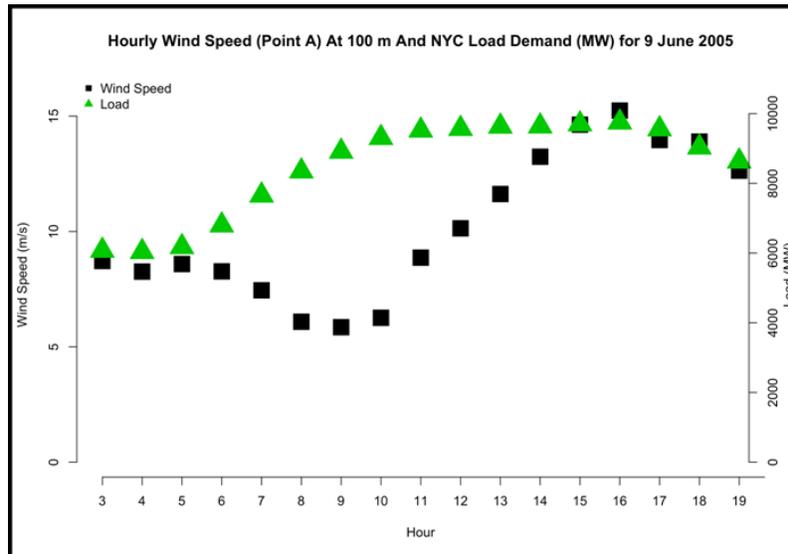
5. The Final Plan Should Incentivize the Development of Offshore Wind Power by Recommending that LIPA Select Offshore Wind in its 280 MW RFP

To expand its renewable portfolio, LIPA released a 280 MW renewable RFP in October 2013, with decisions expected by the end of this year. Investing in a large, utility-scale offshore wind project as part of the 280 MW RFP would address many of the stated key objectives of the Plan by increasing fuel diversity, modernizing Long Island's clean energy infrastructure, enhancing system resiliency and reliability, and creating jobs on Long Island.¹¹ A 210 MW offshore wind project proposed approximately 30 miles east of Montauk Point, and to be

¹¹ See Original Plan, 1-5.

interconnected on the South Fork, is expected to have a NYISO qualified unforced capacity (UCAP) summer rating of almost 85 MW. This further illustrates the point that offshore wind power can play a pivotal role in meeting summer peak demand on the South Fork as well as supplying energy throughout the year. Given these benefits and PSEG-LI's close coordination with LIPA, PSEG-LI should recommend in the Final Plan that LIPA select offshore wind projects when it reaches its RFP decision in December.

In furtherance of PSEG-LI's "ultimate goal" of peak demand reduction, offshore wind power is also the only clean energy opportunity at the scale necessary that can produce electricity to meet the demand of New York City and Long Island suburbs where and when the energy is needed the most. While solar peaks during mid-day and begins to decline in the afternoon, offshore wind will continue to gain in production during the late afternoon and into the early evening, coincident with peak demand. As the figure below shows, offshore wind speeds off of Long Island ramp up during the afternoon and reach their maxima at largely the same time that afternoon demand is peaking.¹² Consequently, offshore wind projects have significant potential to moderate peak loads, thereby dramatically reducing costs to Long Island ratepayers.



NYSERDA, *Pre-Development Assessment of Meteorological and Oceanographic Conditions for the Proposed Long Island – New York City Offshore Wind Project Area*, at 2-24, (Oct. 2010).

By producing power when demand is highest, offshore wind can suppress and stabilize energy prices in New York. As the U.S. Department of Energy study found, the "close proximity of offshore wind resources to major electricity demand centers could allow offshore wind to compete relatively quickly with fossil fuel-based electricity generation in many coastal areas."¹³ While Long Island and much of the eastern seaboard saw huge price spikes in natural gas during

¹² New York State Energy Research & Development Authority, *Pre-Development Assessment of Meteorological and Oceanographic Conditions for the Proposed Long Island – New York City Offshore Wind Project Area: Final Report 10-22 Task 2* (Oct. 2010), at 2-24, Fig. 17.

¹³ U.S. Department of Energy, "A National Offshore Wind Strategy: Creating an Offshore Wind Energy Industry in the United States", at 6 (February 2011).

the 2013-2014 polar vortex, offshore wind is most productive during the winter months, and can help offset fossil-fuel price spikes by providing a low price option during the winter months.

In order to realize these economic and environmental benefits of renewable energy and storage technologies, LIPA and PSEG-LI must act quickly. Many states like Massachusetts, Rhode Island and Maryland are already moving forward with strong programs and policies to advance offshore wind, and projects are underway currently in Massachusetts and Rhode Island. Delaying action on offshore wind until completion of PSEG-LI's Integrated Resource Plan would encourage offshore wind developers to invest their facilities elsewhere, costing Long Island crucial economic and environmental benefits. Therefore, to realize these enormous economic and environmental benefits, PSEG-LI's Final Plan should make a firm commitment to offshore wind by recommending that LIPA invest in an offshore wind project for its 280 MW RFP and explore additional new offshore wind projects through the NYPA-LIPA-Con Ed Collaborative Project and other opportunities as the federal Bureau of Ocean Energy Management moves forward with designating areas offshore New York for commercial wind power leasing, as they have already done for seven states.

6. The Final Plan Should Recommend that LIPA Invest in Energy Storage Proposals for its Generation Storage and Demand Response RFP

In concert with supporting the build-out of offshore wind and other renewables, and in order to further reduce demand and ratepayer costs, the Final Plan should also recommend that LIPA invest in energy storage in the Generation Storage & Demand Response (GSDR) RFP. Energy storage confers many benefits beyond facilitating the transition to renewable energy, including improved power quality and reliability and reduced transmission congestion. Adding energy storage would enable Long Island maximize its clean energy capacity, while also furthering the Plan's objectives to reduce demand, lower ratepayer costs, and defer the need for future conventional generation and accompanying transmission costs.

While it is encouraging that the Updated Plan recognizes battery storage as a valuable technology to reduce peak demand and support renewable generation, it is not clear why the proposed PSEG-LI 5 MW battery storage project should be selected outside of LIPA's current GSDR RFP process. The Joint Commenters are concerned that PSEG-LI's proposal could jeopardize or delay the selection of other battery storage proposals submitted for LIPA's GSDR RFP, and consequently urge PSEG-LI to delay implementation of its 5 MW storage project until after LIPA has completed the GSDR RFP process.

II. Conclusion

Joint Commenters appreciate this opportunity to comment on PSEG-LI's Updated Utility 2.0 Plan. The Company is to be commended, as it has clearly put a great deal of thought and analysis into its drafting, and has done so under a very tight timeframe. As stated above, we urge PSEG-LI to build upon many of the positive components of the proposal and rethink others. We look forward to continuing to work with staff at DPS, PSEG-LI, LIPA, and the Governor's office, as well as other stakeholders, in order to ensure that the Plan ultimately adopted in December maximizes clean energy resources and establishes Long Island as a national leader on clean energy,

Thank you for your consideration.

Respectfully submitted,

_____/s/_____
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