May 05, 2023

To Whom it May Concern,
In the NYISO's evaluation and selection of the most beneficial or cost effective project, PSEG Long Island (PSEGLI) on behalf of LIPA recommends the following considerations:

- Consider projects that offer favorable increases in system capability across the board, including cost-effective increases in export and import capability
- Feasibility and Construction Risks
- Careful consideration of Barrett to Valley Stream Benefit
- Discrepancy between independent cost estimates and developer cost cap
- Risks involved in bypassing Newbridge substation by converting existing transmission line in the EGC-Newbridge-Ruland corridor to 345 kV operation
- Consideration of extreme contingency performance due to concentration of multiple tieline at a single substation
- Retirement of existing transmission facilities and significant disruption to the existing transmission system

The following paragraphs explain these considerations in detail:

PSEGLI recognizes that the intent of the LI OSW PPTN was to ensure the full output from at least 3,000 MW of offshore wind was deliverable from Long Island to the rest of New York State. Since then, NYISO's analysis as part of the Evaluation and Selection process has shown that the differentiation between the projects comes from solving above the minimum offshore wind requirement, and that there are benefits to the transmission system beyond the minimum criteria of export capability.

PSEGLI recommends the NYISO consider projects that offer favorable increases across the board for import, export, and offshore wind connectivity while providing a low cost per MW and added capacity for future offshore wind projects beyond those which have been currently identified, and would likely be required to achieve the state's long term CLCPA objectives. PSEGLI believes that projects which offer substantial increases for import, export, and those which add operational flexibility and increase transfer limits for the transmission system on Long Island will be invaluable for addressing the challenges of an evolving grid through 2030 and beyond.

PSEGLI recognizes that all of the LI OSW PPTN projects under evaluation carry construction risks associated with their designs. To the extent of current reviews, construction risks associated with each project can be overcome, pending more detailed review and analysis in the Facilities studies. Some project designs carry great risks of long outage times and/or retirements to LIPA assets which would be disruptive to the underlying LIPA transmission system and would need to be carefully studied and coordinated if such a project were selected and have a high potential of incurring delays to the project's completion schedule or prompt a design change which may incur additional cost. Designs which feature large and complicated construction projects in and around Newbridge and Northport show great construction risks due to the substations being space constrained and the complexity of proposed construction. PSEGLI recommends the NYISO strongly consider projects which achieve benefits to import, export, and offshore wind injection while minimizing disruption to the existing LIPA transmission system and show lower risks to construction, permitting, outage length and complexity, and project schedules.

The constraint on the LIPA Barrett to Valley Stream transmission lines arising from the interconnection of offshore wind into the Barrett substation has been documented as a risk for curtailment of offshore wind across several NYISO studies, including the Baseline Assessment for the LI OSW PPTN. At the time of the solicitation for the LI OSW PPTN the constraint was expected to be relieved by the offshore wind developer, and PSEGLI supported the NYISO's decision to exclude responsibility for upgrading the Barrett to Valley Stream path from the LI OSW PPTN sufficiency criteria. Since that time, the interconnection design of the Barrett OSW project has evolved and there still remains a great deal of uncertainty as to additional circuits being planned for capacity or other benefits. The feasibility and the ability to integrate into the upgrades of the OSW wind project at Barrett, is uncertain at this time and needs to be carefully considered. PSEGLI notes the significant interest in relieving the constraint, and agreed with the benefits of pursuing a sensitivity scenario assuming that the circuit is still constraining for information on the constraint and how the PPTN projects could offer relief as a means of differentiating the projects. Recognizing the inherent benefit of alleviating the Barrett constraint, PSEGLI cautions against bearing significant incremental costs for such a benefit.

PSEGLI remains concerned about some of the discrepancies observed between the independent cost estimates to construct the projects as designed and the amount provided in some developer's cost caps. Where this discrepancy is large, there exists a risk of increased impact to ratepayers.

PSEGLI has concerns with any proposal that intends to – (a) disconnect and convert to 345kV operation existing LIPA owned 138kV circuits that presently interconnect into the LIPA Newbridge Rd 138kV substation AND (b) bypass Newbridge Rd substation completely.

The existing LIPA owned 138kV circuits that presently interconnect into the LIPA Newbridge Rd 138kV substation, and which were designed for future 345kV operation, were required to enable the full delivery of capacity from the Neptune Regional Transmission System (Neptune RTS) HVDC project. Power imports from Neptune flow directly into the Newbridge Rd substation 138kV bus. As such, disconnecting and bypassing these circuits from Newbridge Rd substation completely would restrict the ability to transfer power imports from Neptune to other parts of the LIPA system.

The above mentioned scenario would result in a "weaker system" at the Newbridge Rd 138kV bus, which could impact Neptune operations and affect Neptune's ability to meet established design and performance requirements. For any proposal that includes this scenario, it is advised that Neptune (a registered Transmission Owner) be considered an "affected system". It is important to consider tying into Newbridge at 345 kV and subsequently review any negative impacts on currently identified benefits of these projects.

PSEGLI has concerns with some of the proposals and their potential to concentrate many new tie lines at single substations, and the added risk this brings to the reliability and resilience of the transmission system due to the impact of extreme contingencies. Extreme contingencies are outside of usual system design criteria, but the added risk and impacts from extreme contingencies should be considered during the comparative evaluation of the projects, especially where some projects bring the potential for larger impacts versus others.

PSEGLI identifies concerns with several proposals that propose to retire and/or rebuild existing LIPA 138kV transmission lines and/or significantly disrupt the operation of the existing LIPA transmission system. At least one of the lines under consideration for retirement is less than five years old, and

several others were designed for future 345kV operation and are required to enable the full delivery of capacity from the Neptune Regional Transmission System (Neptune RTS) HVDC project. Accommodating construction for these projects are anticipated to be difficult and disruptive to the operation of the LIPA transmission system during a lengthy construction period. PSEGLI recommends that projects which minimized this kind of disruption while delivering similar or better results for import, export, and offshore wind connectivity on a good cost per MW basis should be considered more favorably as the NYISO evaluates and selects the most beneficial or cost effective project.

PSEGLI is concerned that more complex projects, including those with multiple crossings of the Long Island Sound, could carry increased permitting risk and would urge the NYISO to consider the aggregate risk when evaluating and selecting the most beneficial or cost effective project.

Thank you for your time and consideration of our comments.