

February 23rd, 2023



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Via E-mail

Re: Long Island Public Policy Transmission Need Production-Cost and Capacity Benefits Results

NextEra Energy Transmission New York, Inc. (NEETNY) appreciates the opportunity to provide additional input and request clarifications on the production cost and capacity benefits results shared by NYISO related to the proposals submitted in responses to the Long Island Public Policy Transmission Need ("LI PPTN") solicitation.

As set forth more fully below, NEETNY offers comments and requests clarifications on the following:

- I. NEETNY requests that NYISO provide more details on how the round-trip analysis was performed for each solution, including additional constraints added to the production-cost model to capture new congestion flows impacted by significant changes in network topology.**
 - A. NEETNY requests confirmation that the full round-trip analysis to identify applicable additional constraints and contingency pairs was performed separately for each proposal due to the uniqueness of the solutions and significant differences in system powerflows.
 - B. NEETNY requests that NYISO provide to all stakeholders the list(s) of top 20 binding constraints (monitored elements and contingency pairs) for both the pre-project and each of the sixteen post-project simulations, including hours congested and congestion costs.
 - C. NEETNY performed its own powerflow analysis for each of the sixteen LI PPTN proposals to identify appropriate constraints to include in production-cost simulations. NEETNY found significant NYC congestion in some projects resulting from adding the new project-specific constraints based on the powerflow analysis. NEETNY has provided to NYISO, in a separate email, the list of new proposal-specific constraints that resulted in significant congestion in production-cost modeling and simulation and requests NYISO to confirm whether these specific constraints were included in NYISO's analysis. If not, NEETNY requests NYISO to consider adding the top congestion drivers that NEETNY has identified and re-perform the production cost simulations.
- II. Could NYISO provide additional detail to help explain unintuitive production-cost simulation results when comparing across the LI PPTN proposals?**
 - A. For example, Core 6 increases OSW production 400+ GWh more than Core 5 and has greater decreased CO2 emissions, but resulted in annual production-cost savings of \$48M less than Core

5. Similarly, Base 1 is in the bottom third of projects in terms of its increase in the OSW delivered in the production cost simulations. However, NYISO's results also show it as the top performing proposal for reduced CO2 emissions for the region (although not for Long Island, NYC, and NYISO). Can NYISO please provide additional results data like congestion by constraint or curtailment by OSW, and any additional data that would be helpful to explain these unintuitive results?

III. Could NYISO provide more detail on the Barrett – Valley Stream Scenario that NYISO is planning to run?

- A. Will Empire Wind II be consistently modeled at the existing Barrett 138 kV substation for all proposals in the production cost simulations?
- B. Each of the LI PPTN solutions results in transmission topology modifications at and around the existing Barrett 138 kV station. As a result, NYISO has allowed consideration of different POIs in its Electrical Expandability analysis to optimize performance and OSW capability, and consistent with that approach, NEETNY requests NYISO consider injection of Empire Wind II at Valley Stream for NEETNY's Core proposals as previously presented to NYISO¹.

IV. Could NYISO provide more detailed results from the capacity benefits analysis, including the resulting LOLE broken out by NYISO LBMP Zone for each proposal?

- A. The capacity benefit analysis as presented by NYISO is not clear whether Zone K ratepayers receive the greatest benefit based on the current NYISO LOLE calculation methodology. Can NYISO provide a zonal breakdown of the capacity benefit metric?
- B. Absent NYISO performing a full analysis to identify LCRs that is reflective of reasonable assumptions including expected generation retirements, NEETNY believes this metric, as determined with NYISO's current methodology, is not beneficial for comparing LI PPTN proposals for three reasons:
 - i. The metric and methodology appear to be arbitrary when considering that the planned NYISO case has an LOLE well below 0.1, and therefore the actual capacity benefits of these projects would not materialize in the planned case assumptions.
 - ii. NYISO's approach to adjust the LOLE to 0.1 using the LCR Optimizer seems to disproportionately impact Zone J leaving it very limited in reserves. As a result, projects that include a slight increase in transfer capability between Zones J and K result in overstated benefits to New York City. This is more of an ancillary benefit that is a byproduct of the methodology selected, not a true comparison of project benefits.
 - iii. If NYISO opts to continue to focus primarily on Zone K reliability impacts only, as was done with the powerflow analysis due to the uncertain and speculative assumptions in Zone J, it would be consistent to focus more on the specific capacity benefits to Zone K in this comparative analysis as well.

¹ NYISO PPTN Developer Meeting with NextEra, July 13, 2022.

- C. Could the NYISO provide additional data or results to show how they developed the various transfer capabilities used in the capacity benefits analysis, including limiting elements and contingency pairs?

NEETNY appreciates the opportunity to continue to offer input into NYISO's evaluation of the LI PPTN proposals to help ensure the long-term benefits of each LI PPTN proposal to Long Island and the rest of New York are fully considered. NEETNY also looks forward to future opportunities to provide input as NYISO further details its evaluation assumptions and analysis.

Sincerely,

Andrew Taylor
Executive Director
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