Comments on Market Impacts Assessment

Submitted on Behalf of the New York Transmission Owners¹, LIPA and NYPA (NYTOs)

The NYTOs encourage the NYISO to work with stakeholders to fully understand and clearly identify needs *before* proceeding to develop solutions.

The NYISO should repeat its market impact analysis using production cost simulation for a broader set of representative days to: (i) better capture the impact of renewables on imports/exports; (ii) better define unit commitments; (iii) identify low capacity factor units; and (iv) glean insights on transmission needs and curtailments of non-emitting units. In addition, the NYISO should perform sensitivity studies to bookend their current analyses. The NYISO should evaluate scenarios with various percentages of fossil resources retired, various levels of energy storage deployment across the system, and carbon pricing implemented. Stakeholders from across the sectors have expressed concern about the major market revisions that may be considered in response to the limited market impact analysis.

To the extent possible, proposals should consider how to best incorporate the capabilities of inverter-based technologies/storage.

Additional Reforms for Consideration/Evaluation

- Enhance CARIS process by including CO₂ adder in LMP (to the extent not already considered in carbon pricing/RGGI)
- Expedite and improve Public Policy Transmission Planning Process utilizing lessons learned
- Monetize Transmission Security
 - The NYISO should consider capacity market reforms to address identified transmission security constraints within the market.
- Interconnection clustering
 - The NYISO should consider planning process reforms to allow prebuilding of joint transmission interconnection facilities to facilitate/quicken renewable development.
 Costs may be lower due to economies of scale. This may also allow continued state jurisdiction with potential ties to renewable cost allocation.
- Enhanced performance standards (tied to fuel availability)
 - e.g., performance-based compensation for operating reserves as recommended by the MMU (see Recommendation 2016-2 in the State of the Market report) or capacity product reforms as contemplated in the Performance Assurance project
- Incorporation of energy storage into transmission planning
 - How are energy storage assets that serve as deferrals to transmission investment incorporated into NYISO's transmission planning processes?

Comments on NYISO's preliminary ideas/questions

¹ The New York Transmission Owners include Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., Niagara Mohawk Power Company d/b/a National Grid, New York Electric & Gas Corporation, Orange and Rockland Utilities, Inc., and the Rochester Gas and Electric Corporation.

- For ramping and regulation reforms, it would be helpful for the NYISO to provide more analysis
 on the expected needs of the system. For example, the NYISO may also want to look at the
 maximum ramp capability needed during any given 3-hour period to account for the full
 magnitude of the net load ramp.
- Separate regulation up and regulation down products.
 - As noted above, the NYISO should perform sensitivities to evaluate regulation capability on the system under various resource mix scenarios.
 - NYISO should consider whether a down-ramp reserve product might be warranted, including how to calculate the down-ramp reserve clearing price, and whether a "missing money" structure might be needed in the absence of sufficient down-ramp capable capacity.

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- New ramping product to cover forecast error.
 - When considering a ramping product, it is important that we do not provide duplicative compensation for services already provided through existing market products.
 - The NYISO and stakeholders should consider how to compensate performance v. capacity and how those costs might be allocated.
 - Ramping requirements could be defined locationally so that it is procured where ramping is most valuable.
 - The amount of ramping procured in the Day-Ahead market should consider that the ISO will not be able to ramp resources smoothly from one hour's schedule to the next hour's schedule.
- The requirements for providing capacity may need to be redefined
 - A ramping capacity product should be evaluated.