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## **II. BACKGROUND AND PURPOSE**

After many years with surplus installed capacity and low capacity prices, older resources in ISO-NE have begun retiring, resulting in higher clearing prices in ISO-NE. In October 2016, the Commission approved rules that allow external resources that have qualified to sell capacity in ISO-NE Forward Capacity Auction that runs three years before the delivery period to also be qualified to sell capacity in the reconfiguration auctions occurring less than three years before the delivery period.<sup>2</sup> One such resource that has qualified to sell its capacity in New England is located in Zone G in southeast New York. Consequently, for the first time, resources in import-constrained zones of New York have the incentive to export to New England.

The NYISO's existing rules governing its planning studies and capacity market treat a generator that exports capacity to a neighboring control area as if it does not exist. While this has been a reasonable approximation of how exports from unconstrained areas affect the NYISO, this approach leads to inefficient results when the generator is situated in an import-constrained zone and the external control area is interconnected with other regions of the NYISO. In this case, because the unit will continue to be committed and dispatched in the import-constrained area, it will be providing local reliability value to the import-constrained area and, therefore, need not be replaced in its entirety. The current rules, which would treat the unit as if it no longer exists, would require it to be completely replaced in the local area, which would produce capacity prices that are not reflective of the marginal reliability value of capacity in the local

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<sup>2</sup> See Commission Docket ER16-2451.

area. We identified this concern in our 2015 State of the Market Report. At that time, the NYISO believed that the earliest that a resource in an import constrained zone would potentially export to a neighboring RTO would be the Spring of 2018. However, because of the changes approved in ISO-NE in October 2016, capacity is expected to export to ISO-NE from Zone G as soon as the Spring of 2017. ISO-NE is interconnected to both Zone F and Zone G, where Zone G is within the Southeast New York capacity zone and Zone F is not. Thus, the generator in Zone G is at a higher value (i.e., more import-constrained) location than ISO-NE from the NYISO's perspective. In cases where a generator exports to a less-constrained location, it is important for the markets to recognize that the resource still provides reliability benefits to the import-constrained region.

The NYISO's November 30 filing proposes new rules to address this issue prior to its capacity auction that will run in early 2017 for the 2017-2018 Capability Year. Although it doesn't represent a long-term solution, which would be impossible to develop and implement in this timeframe, we support the NYISO's proposal since it addresses a significant gap in the existing rules that would be very costly to New York consumers if it were left unaddressed for the upcoming Capability Year. The NYISO has acknowledged that its proposal does not deal with certain issues that must be deferred until a second phase of the stakeholder process in 2017 (Phase 2).<sup>3</sup>

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<sup>3</sup> See November 30 filing letter at pages 17-18, which states: "In consultation with stakeholders, the NYISO will prioritize and evaluate: alternative methodologies to determine the Locality Exchange Factor, including a probabilistic method; whether Zone K (Long Island) should be an Import Constrained Locality; whether there should be additional compensation to generators the export from an Import Constrained Locality; whether a portion of imports from neighboring External Control Areas should be permitted to satisfy a Locational Minimum Unforced Capacity Requirement; the current rule for the expiration of Capacity Resource Interconnection Service; whether there should be further modifications to the capacity market power mitigation measures; the consideration of potential exports from an import constrained Locality in the NYISO's planning processes; the statewide IRM, which is overseen by the NYSRC; and the calculation of LCRs."

### **III. COMMENTS ON THE PROPOSAL**

We generally support the NYISO's proposal, which was developed in an accelerated fashion. We have limited comments on specific elements of the proposal.

#### **A. Locality Exchange Factor Should Ultimately Be Based on Power Flow Analysis**

The impetus for the NYISO's proposal was that retirements of capacity in New England will lead to higher prices there in the coming years. Forward capacity auction prices for the unconstrained portion of New England will rise from \$3.15/kW-month in the 2016/17 Capability Year to \$7.025/kW-month in the 2017/18 Capability Year. In New York over the last 12 months, spot auction prices averaged \$2.45/kW-month in Zones A-F and \$6.27/kW-month in Zones G-I, so it is not surprising that some NYISO resources are interested in selling capacity to ISO-NE in the coming years.

As we discussed above, the exporting unit continues to support local reliability in the import-constrained area. However, some replacement capacity must be purchased in the import-constrained zone since some of the export from Zone to New England does not unload the UPNY-SENY interface into Southeast New York. For this reason, the NYISO proposed a Locality Exchange Factor that represents the share of the exporting resource that would not need to be replaced by capacity in the import-constrained area. The MISO solution did not include such a factor, which is the equivalent of assuming a Locality Exchange Factor of 100 percent.

NYISO's proposal includes a proposed Locality Exchange Factor of 80 percent for the 2017/2018 Capability Year. This factor was proposed and approved by the required supermajority of stakeholders. Ultimately, this factor should be based on a power flow analysis that accurately reflects the extent to which supporting the capacity export will encumber the NYISO's transmission capability into Southeast New York. NYISO performed a preliminary analysis that would support of Local Exchange Factor of 48 percent. We recognize that this is a

preliminary result. Nonetheless, it has a more substantive analytic basis than the 80 percent factor approved by the stakeholders so it would be reasonable for the Commission to approve NYISO proposal, but modify the factor to be consistent with NYISO's power flow analysis.

Regardless of the factor approved for the 2017/2018 Capability Year, it is far more important that this factor be based on accurate power flow modeling in all future years so we would encourage the Commission to mandate this as a component of the NYISO's long-term solution to this issue. It is critically important to use capacity market parameters that accurately reflect physical conditions, planning assumptions, and reliability criteria so that market signals reflect the value of capacity over the long-term. Therefore, basing the Local Exchange Factor on an accurate power flow analysis is necessary to send efficient economic signals that are consistent with NYISO's reliability needs.

**B. Commission Should Require NYISO to Develop Rules to Compensate Resources Efficiently**

The NYISO's proposal to define a Locality Exchange Factor for exports to ISO-NE has two very significant implications for market efficiency. First, a generator in Zone G that exports to ISO-NE provides counter-flows that relieve the UPNY-SENY constraints that have significant value for meeting planning reliability needs. Second, exports to ISO-NE flow from the unconstrained region to ISO-NE and the import-constrained region to ISO-NE, so the foregone value of capacity backing the export is between the prices of capacity in Zone F and Zone G. In general, efficient market design will lead to prices and corresponding settlements with generators that are consistent with the value and/or cost to the system. Adhering to this principle will provide efficient incentives for participants to engage in cross-border transactions and lower the overall costs to across both markets.

The NYISO developed its proposal under a short timeframe and deferred certain elements for consideration in Phase 2 because they could not be developed and implemented for the

2017/2018 Capability Year. While these elements may require significant time to develop fully, it is important that the Phase 2 proposal address some key issues, including establishing rules that: (a) set prices for imports from external control areas to the NYISO that are consistent with the the Locality Exchange Factor, and (b) recognize the local reliability value that the exporting generators provide to the import-constrained areas in NYISO.

The first of these two issues can be illustrated by examining how the price is set for imports from ISO-NE. Currently, imports from ISO-NE are paid the same price as capacity in Zone F. However, the Locality Exchange Factor of 48 percent implies that imports have a value that is a weighted average equal to 48 percent of the Zone F price and 52 percent of the Zone G price. If importers are not compensated accordingly, then it would lead the NYISO to forego imports when the cost of ISO-NE capacity was just \$4.00/kW-month and the Zone F price was \$3.00/kW-month. This would be inefficient if the Zone G price was \$7.00/kW-month since the Locality Exchange Factor of 48 percent would imply that imports were worth \$5.08/kW-month to the NYISO.

Addressing the second of these issues may involve establishing and pricing a local-reliability product that would include obligations for the supplier. Such obligations would not interfere with the supplier's obligation to New England. Additionally, it would allow NYISO to satisfy all of its planning needs without fully replacing the exporting resource with other procurements in the import-constrained zone. This is enabled because the resource would accept obligations that are comparable to the obligations accepted by all other suppliers in the zone. Ultimately, this type of solution will produce efficient prices and incentives because it brings into alignment: the NYISO's planning needs, its capacity procurements, and the settlements with all of the resources that are contributing to satisfying its needs.

Absent these two elements of a reasonable long-term solution, it will be difficult to expect that the solution will produce efficient long-term economic signals and cross-border transactions. Therefore, we recommend the Commission approve the NYISO's short-term solution for the upcoming Capability Year, but require that these two design elements be addressed in the second phase of the proposal.

#### **IV. CONCLUSIONS**

WHEREFORE, for the foregoing reasons, Potomac Economics, Ltd. respectfully requests the Commission to grant its motion to intervene in this proceeding and accept this comments. As described in these comments, we respectfully recommend that the Commission approve NYISO's short-term proposal to address the costly and inefficient outcomes that may otherwise prevail for the upcoming Capability Year. However, we also recommend that the Commission consider adopting the Locality Exchange Factor that is consistent with NYISO's preliminary power flow analysis, and mandate that the NYISO file a long-term proposal that address the two key design elements we discuss in these comments.

Respectfully submitted,

*/s/ David B. Patton*

David B. Patton  
President  
Potomac Economics, Ltd.

December 21, 2016

## CERTIFICATE OF SERVICE

I hereby certify that I have this day e-served a copy of this document upon all parties listed on the official service list compiled by the Secretary in the above-captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated this 21st day of December 2016 in Fairfax, VA.

*/s/ David B. Patton*

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