UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Grid Enhancing Technologies Docket No. AD19-19-000

POST-TECHNICAL CONFERENCE COMMENTS OF
THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

The New York Independent System Operator, Inc. ("NYISO") respectfully submits its comments in response to the *Notice of Extension of Time* in the above-captioned proceeding issued by the Federal Energy Regulatory Commission ("Commission") on January 29, 2020.[1] In its comments, the NYISO addresses certain questions raised in the Commission's Notice Inviting Post-workshop Comments ("Notice") concerning grid-enhancing technologies ("GETs") that increase the capacity, efficiency or reliability of transmission facilities.[2] The NYISO appreciates the opportunity to work with the Commission and Commission Staff through the technical conference and the submission of written comments.

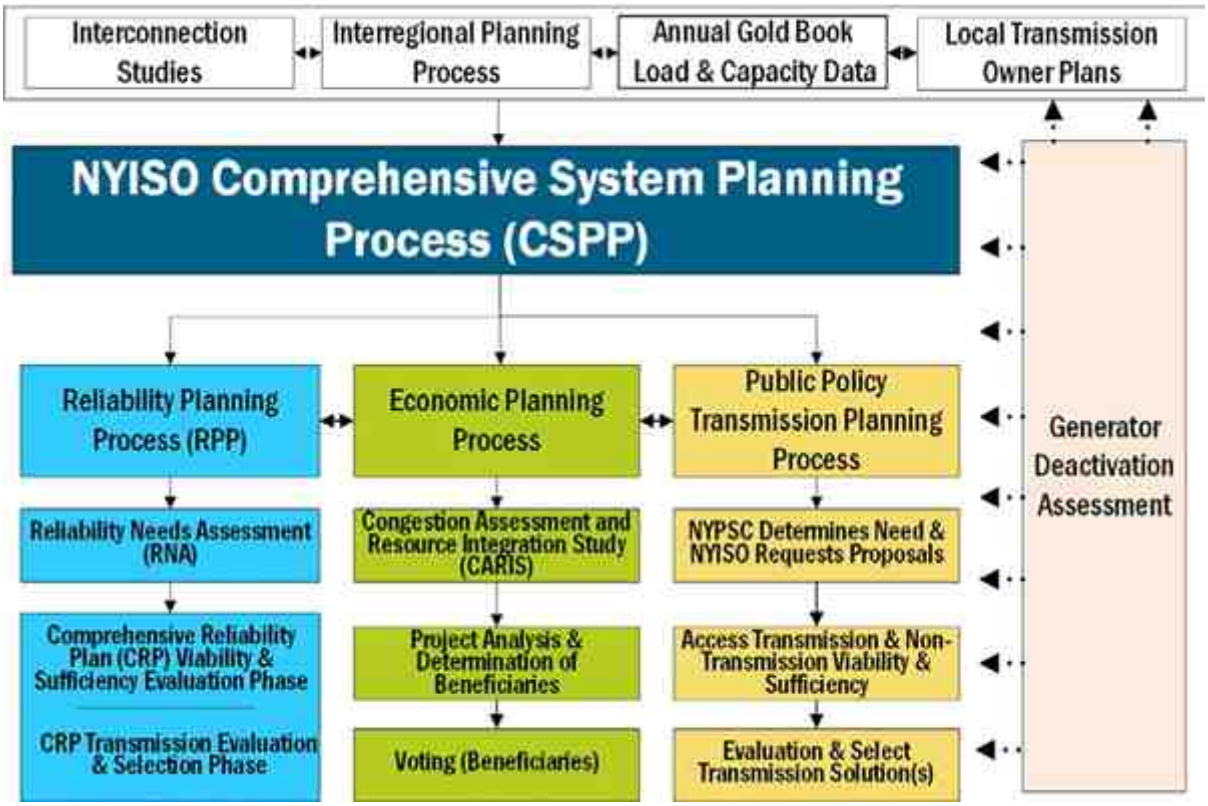
I. COMMENTS

The NYISO's planning processes provide independent and authoritative information to investors, stakeholders, and policymakers, thereby facilitating investment in new and upgraded transmission for the New York bulk power system. The NYISO's interconnection and long-term planning processes support the reliability and efficiency of the electric grid, and the ability of the electric grid to meet public policy goals. Through its Comprehensive System Planning Process, the NYISO conducts Reliability Planning, Public Policy Transmission Planning, and Economic

[1] Grid-Enhancing Technologies, *Notice of Extension of Time*, Docket No. AD19-19-000 (January 29, 2020).

[2] Grid-Enhancing Technologies, *Notice Inviting Post-workshop Comments*, Docket No. AD19-19-000 (January 17, 2020).

Planning to address Reliability Needs and Public Policy Transmission Needs, and to identify and relieve uneconomic congestion on the transmission system.[3] Interregional Transmission Projects identified under the Northeast ISO/RTO Planning Coordination Protocol are eligible for consideration and selection to meet regional transmission needs in New York.[4] The NYISO also conducts a facility-specific Generator Deactivation Process to address reliability needs that could result from deactivations, including the retirement or mothballing of Generators.[5] The relationships among the NYISO's long-term planning processes are illustrated in the following diagram:



[3] *See* NYISO Open Access Transmission Tariff ("OATT") Attachment Y, Sections 31.2, 31.3 and 31.4.

[4] *See* Amended and Restated Northeastern ISO/RTO Planning Coordination Protocol; *available at:* https://www.nyiso.com/documents/20142/1406358/Northeast_Planning_Protocol_FINAL_SIGNED_VERSION.pdf/8471488b-2e9e-5060-7c04-4168e86e69b4.

[5] OATT Attachment FF, Section 38, OATT Section 6.14 (Rate Schedule 14).

Proposed GETs projects, like all proposed grid-level projects, are already eligible for consideration under all of the NYISO's long-term planning processes. The NYISO's planning processes are designed to encourage market-based solutions first and foremost, and to select a regulated transmission solution only when market-based solutions are insufficient to address a need.[6] The NYISO's markets are designed to send price signals for economic investments, including investments in new GETs projects. Projects that expand the transmission capability of the system may also be eligible for incremental Transmission Congestion Contracts (TCCs), which could provide revenue for such projects consistent with their ability to reduce grid congestion.[7] When necessary, the NYISO selects transmission projects consistent with the evaluation and selection and provisions of the NYISO's tariffs.[8] Selected projects may obtain cost allocation and cost recovery through the NYISO's tariffs.[9]

The NYISO has not received any transmission project proposals from stakeholders that address FERC Order No. 679 incentives for innovative technologies. Nevertheless, the NYISO has developed and adopted new market rules to incorporate Energy Storage Resources ("ESR") and Distributed Energy Resources ("DER") in a manner that NYISO expects will provide the greatest value to the power grid.[10] The NYISO's ESR participation model will allow storage resources either to self-manage their energy levels or to use the NYISO's energy level

[6] NYISO OATT Sections 31.2.8.1.1; 38.10.1.

[7] NYISO OATT Attachment M, Section 19.2.

[8] *See, e.g.,* NYISO OATT Sections 31.2.6.5, 31.4.7, 31.4.8.

[9] *See* NYISO OATT Sections 31.1.4, 31.4.8.2, 31.5.5.1, 6.10 (Rate Schedule 10).

[10] New York Independent System Operator, Inc., *Compliance Filing and Request for Extension of Time of Effective Date re FERC Order No. 841,* Docket Nos. RM16-23-000, AD16-20-000, ER19-467-000 (December 3, 2018); Order on Compliance Filing, Docket Nos. ER19-467-000 *et al.,* 169 FERC ¶ 61,225 (December 20, 2019). New York Independent System Operator, Inc., *Proposed Tariff Revisions Regarding Establishment of Participation Model for Aggregations of Resources, Including Distributed Energy Resources*, Docket No. ER19-2276-000 (June 27, 2019); *Order Accepting Tariff Revisions and Directing Compliance Filing and Informational Report*, Docket No. ER19-2276, *et al.,* 170 FERC ¶ 61,033 (January 23, 2020).

monitoring capabilities. The option of relying on the NYISO's capabilities to monitor and manage energy storage levels will optimize availability of storage resources for periods when they can best support bulk power system reliability. The NYISO also recently received an order accepting its proposed participation model for DER that will open New York's wholesale Energy, Ancillary Services, and Capacity Markets to DER technologies. The DER rules will become effective over the next twenty-two months.[11]

Furthermore, under FERC Order No. 1000 the NYISO adopted the sponsorship model that allows developers to propose innovative "design and build" projects to compete for selection as the more efficient or cost effective transmission solution.[12] In the NYISO's Public Policy Transmission Planning Process ("Public Policy Process"), interested entities propose, and the New York State Public Service Commission (PSC) identifies, transmission needs driven by public policy requirements.[13] Once the PSC determines the needs, the NYISO solicits transmission and other types of projects, performs planning studies, and selects the transmission project(s) that will meet those need(s) in a more efficient or cost-effective manner.[14] The NYISO applies a number of criteria to select a transmission project, including the operability, expandability and performance of the proposed projects on the New York State Bulk Power Transmission Facilities.[15]

[11] The NYISO's filing proposed a series of effective dates for different aspects of the DER participation model. The first set of tariff modifications will become effective on May 1, 2020, and the final set of tariff revisions are expected to become effective in the fourth quarter of 2021.

[12] OATT Sections 31.2.4.7, 31.2.6.1, 31.4.3.1, 31.4.4.3, 31.4.5.1.

[13] OATT Sections 31.4.2 and 31.4.2.1.

[14] OATT Sections 31.4.6.3 - 31.4.6.5, 31.4.8 and 31.4.11.

[15] OATT Sections 31.4.8.1.3-31.4.8.1.5.

To date, the NYISO has selected three transmission projects through its Public Policy Process. In October 2017, the NYISO's Board of Directors ("Board") selected a proposal from NextEra Energy Transmission New York to address the public policy need for new transmission in Western New York to support the State's goal of maximizing the flow of energy from renewable resources in the region.[16] On December 17, 2015, the New York Public Service Commission identified Public Policy Needs to increase transfer capability from central to eastern New York by at least 350 MW ("Segment A") and from the Albany region through the Hudson Valley region by at least 900 MW ("Segment B").[17] Following a detailed evaluation of the benefits and costs of the proposals, and careful consideration of stakeholder comments, the Board issued a decision on April 8, 2019, finding that a joint proposal by North American Transmission and the New York Power Authority ("NYPA") was the more efficient or cost-effective solution for Segment A. For Segment B, the Board found that the more efficient or cost effective solution was a joint proposal by National Grid and New York Transco.[18]

The NYISO received a number of innovative GETs proposals in the transmission projects received in the Western New York and AC Transmission Public Policy Processes. The NYISO finds that combining consideration of new transmission facilities with the application of GETs has enhanced the performance of two of the winning projects and contributed to their selection in the NYISO's competitive transmission processes.

[16] *See* https://www.nyiso.com/documents/20142/2892590/Western-NY-Board-Decision-Report-20171017.pdf/5c16978f-5040-2acd-0a15-b4247223d2c7

[17] NYPSC Case No. 12-T-0502, *et al.,* Proceeding on Motion of the Commission to Examine Alternative Current Transmission Upgrades, Order Finding Transmission Needs Driven by Public Policy Requirements (December 17, 2015).

[18] *See* https://www.nyiso.com/documents/20142/2892590/Board-Decision-AC-Transmission-2019-04-08.pdf/071a48d2-be02-0377-b507-b74c9e06d7a7

The distinguishing factor for the project selected to meet the Western New York need was its superior operability. The project proposed a phase angle regulator ("PAR") that uniquely provides the ability to control the power flow in western New York. Under the NYISO's tariff, when evaluating operability the ISO can consider how the proposed project may provide additional flexibility in operating the system, such as dispatch of generation, ability to remove transmission for maintenance, reducing the need to cycle generation, or providing more balance in the system to respond to system conditions that are more severe than design conditions. The directional and megawatt flow control of the PAR will help to maximize the output of hydropower from the Niagara facility.

The second example of a selected project that incorporated GETs is the project selected to meet the Segment B of the AC Transmission need. The winning project included series compensation on the new transmission line. That technology added greater operational flexibility and increased transfer capability of the facility across the Upstate New York/Southeast New York interface.

In summary, FERC Order No. 1000 has facilitated grid-level transmission development in New York, including GETs. The current NYISO tariff provides a wide range of metrics to evaluate the project performance as well as cost effectiveness. Proposals that include both new transmission facilities and GETs adaptation could be favorable to offering a more efficient or cost effective transmission projects in the NYISO's competitive selection process. Given that the NYISO already considers GETs in its long-term transmission planning processes approved by the Commission under Order No. 1000, the NYISO does not consider it necessary to amend its planning processes to provide for the application of GETs in New York.

II. COMMUNICATIONS AND CORRESPONDENCE

All communications regarding this filing should be directed to:

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III. CONCLUSION

The NYISO respectfully submits these post-technical conference comments for the Commission's consideration.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. §385.2010.

Dated at Rensselaer, NY this 14th day of February 2020.

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