NEW YORK INDEPENDENT SYSTEM OPERATOR
10 Krey Boulevard ♦ Rensselaer, NY 12144

WESTERN NEW YORK PUBLIC POLICY TRANSMISSION NEED PROJECT SOLICITATION

Response due December 31, 2015

November 1, 2015

Dear NYISO Stakeholder or Interested Party:

With this letter, the NYISO solicits Public Policy Transmission Projects[1] and Other Public Policy Projects to address the Western New York Public Policy Transmission Need for evaluation in the NYISO's Public Policy Transmission Planning Process.

I. Western New York Public Policy Transmission Need

On August 1, 2014, the NYISO initiated its first Public Policy Transmission Planning Process by soliciting proposed transmission needs that stakeholders or interested parties believe are driven by Public Policy Requirements.[2] On October 3, 2014, the NYISO filed for consideration by the New York State Public Service Commission ("NYPSC") the proposed transmission needs it received from eight entities. On November 12, 2014, the NYPSC published the proposed needs in the State Register in accordance with the State Administrative Procedure Act for comments. Following its receipt and review of comments, the NYPSC sought supplemental comments on April 3, 2015, relating specifically to transmission capability in Western New York. Upon considering the various comments submitted, the NYPSC issued an order on July 20, 2015 ("NYPSC Order")[3] that found "significant environmental, economic, and reliability benefits could be achieved by relieving the transmission congestion identified in Western New York"[4] and therefore adopted a Public Policy Requirement concerning transmission congestion in Western New York.[5] The NYPSC referred the Western New York Public Policy Transmission Need to the NYISO for the solicitation and evaluation of potential solutions.[6] The NYPSC Order directed the NYISO:

> to consider solutions for increasing Western New York transmission capability sufficient to ensure the full output from NYPA's Niagara hydroelectric generating facility (i.e., 2,700 MW including Lewiston Pumped Storage), as well as certain levels of simultaneous imports from Ontario across the Niagara tie lines (i.e., maximize Ontario imports under normal operating conditions and a least 1,000 MW

[1] Capitalized terms in this letter refer to defined terms in the NYISO's Open Access Transmission Tariff ("OATT") or the NYISO Public Policy Transmission Planning Manual.
[2] The requirements for the Public Policy Transmission Planning Process are set forth in Attachment Y of the OATT and the NYISO Public Policy Transmission Planning Process Manual.
[3] NYPSC Case No. 14-E-0454 – In the Matter of New York Independent System Operator, Inc.'s Proposed Public Policy Transmission Needs for Consideration, *Order Addressing Public Policy Requirements for Transmission Planning Process* (July 20, 2015).
[4] *Id.* at p. 27.
[5] *Id.* at p. 28.
[6] *Id.* at p. 33.

under emergency operating conditions). This increased capability should maximize transfers out of Load Zone A and into the rest of the State.

The NYISO's analysis should ensure no transmission security violations, thermal, voltage or stability, would result under normal and emergency operating conditions. The analysis should also ensure the system would be maintained in a reliable manner with fossil-fueled generation in Western New York out-of-service, as well as in-service. The NYISO shall also consider other metrics in its evaluation of this Public Policy Requirement, including: changes in production costs; Load-Based Marginal Prices; transmission losses; emissions; Installed Capacity costs; Transmission Congestion Contract revenues: transmission congestion; impacts on transfer limits; and resource deliverability.[7]

The NYISO made presentations at combined meetings of the Transmission Planning Advisory Subcommittee and Electric System Planning Work Group on July 30, 2015, August 27, 2015, and October 29, 2015 to review the NYPSC's determination of a Public Policy Requirement and the nature of the resulting Western New York Public Policy Transmission Need.[8]

The NYISO has established sufficiency criteria in accordance with the criteria set forth by the NYPSC Order, and has developed baseline models and associated power flow results to aid interested parties in developing project proposals. The attached "Study Cases and Sufficiency Criteria" document provides the details of the system models and criteria that the NYISO will apply to determine the sufficiency of each proposed Public Policy Transmission Project and Other Public Policy Project to satisfy the Western New York Public Policy Transmission Need.

II. Project Submission Requirements

Pursuant to Section 31.4.3 of Attachment Y to the NYISO OATT,[9] the NYISO hereby solicits Public Policy Transmission Projects and Other Public Policy Projects (including, but not limited to, generation and demand-side resources) to address the Western New York Public Policy Transmission Need. Developers, including Transmission Owners and Other Developers, must provide project information in accordance with OATT Section 31.4.5 and Section 3.3 of the Public Policy Transmission Planning Process Manual ("Manual")[10] for the NYISO to analyze proposed Public Policy Transmission Projects and Other Public Policy Projects in accordance with the criteria set forth in the NYISO's tariff and the sufficiency criteria set forth in the attached document that are derived from the criteria set forth by the NYPSC Order. A Developer proposing a Public Policy

[7] *Id.* at 27-28.
[8] The NYISO's presentations are posted on its website under meeting materials at the following link: http://www.nyiso.com/public/markets_operations/committees/meeting_materials/index.jsp?com=bic_espwg.
[9] On June 29, 2015, the NYISO made a filing pursuant to Section 205 of the Federal Power Act to make certain clarifying changes and additions to OATT Sections 31.1, 31.4 and 31.5 in preparation for conducting its Public Policy Transmission Planning Process. The NYISO's filing and the amended tariff sections can be viewed via the NYISO's e-tariff viewer. The filing is located at: https://nyisoviewer.etariff.biz/ViewerDocLibrary/Filing/Filing1029/Attachments/Filing_1029.zip. The NYISO will apply the existing Public Policy Transmission Planning Process requirements set forth in Attachment Y of the OATT pending FERC's determination regarding the tariff revisions proposed in the June 2015 filing.
[10] The NYISO Public Policy Transmission Planning Process Manual is posted at: http://www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Manuals/Planning/M-36_Public%20Policy%20Manual_v1_0_Final.pdf.

Transmission Project or an Other Public Policy Project must submit the project information required in Attachment B of the Manual for the NYISO to analyze the project's viability and sufficiency.[11] A Developer proposing a Public Policy Transmission Project must also submit the project information required in Attachment C of the Manual for the NYISO's project evaluation and selection.[12]

A Developer proposing a Public Policy Transmission Project that is not yet qualified to submit transmission projects must submit a Developer Qualification Form on or before December 1, 2015, as required by Section 3.1 of the Manual (*see* OATT Sections 31.4.4.1 and 31.4.4.3.) The form can be found in Attachment A to the Manual. A Developer previously qualified to submit a transmission project must submit updates to its Developer qualification information in accordance with NYISO Technical Bulletin 232.[13] All submissions of Developer Qualification Forms and updates must be submitted to developerqualification@nyiso.com.

A Developer should submit its project proposal to the NYISO in the manner described below on or before December 31, 2015 to be evaluated in the NYISO's Public Policy Transmission Planning Process. A Developer must separately comply with the requirements for project interconnection or transmission expansion, as applicable, as described in the Transmission Expansion and Interconnection Manual.[14] Each Developer is encouraged to submit as early as possible a valid Interconnection Request for its project pursuant to Section 30.3.3 of Attachment X of the OATT or a Study Request for its project pursuant to Sections 3.7.1 or 4.5.1 of the OATT, as applicable. Pursuant to Section 3.3.2 of the Manual (*see* OATT Section 31.4.4.4), a Developer of a Public Policy Transmission Project must also include with its submittal: (i) an executed study agreement, which can be found in Attachment E to the Manual,[15] (ii) a non-refundable application fee of $10,000, and (iii) a study deposit of $100,000.[16] Please contact NYISO Accounts Receivable (NYISOAccountsReceivable@nyiso.com) regarding submission of the application fee and study deposit.

[11] Attachment B to the Public Policy Transmission Planning Process Manual is posted at: http://www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Manuals/Planning/Child_Public_Policy_Manual/M-36_Public%20Policy_Att%20B_v2015-07-31_Final.pdf.

[12] Attachment C to the Public Policy Transmission Planning Process Manual is posted at: http://www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Manuals/Planning/Child_Public_Policy_Manual/M-36_Public%20Policy_Att%20C_v2015-07-31_Final.pdf.

[13] Technical Bulletin 232 is posted at: http://www.nyiso.com/public/webdocs/markets_operations/documents/Technical_Bulletins/Technical_Bulletins/Technical_Bulletins/TB-232.pdf.

[14] The NYISO Transmission Expansion and Interconnection Manual is posted at: http://www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Manuals/Planning/tei_mnl.pdf.

[15] Attachment E to the Public Policy Transmission Planning Process Manual is posted at: http://www.nyiso.com/public/webdocs/markets_operations/documents/Manuals_and_Guides/Manuals/Planning/Child_Public_Policy_Manual/M-36_Public%20Policy_Att%20E_v2015-07-31_Final.pdf.

[16] These additional submission requirements do not apply to an Other Public Policy Project.

Proposed Public Policy Transmission Projects and Other Public Policy Projects must be sent electronically to: publicpolicyplanningmailbox@nyiso.com, including in the subject line "Western New York PPTN Project." Any supplemental hard copy information should be sent to Zach Smith, Director of Transmission Planning, at 10 Krey Boulevard, Rensselaer, New York 12144. Questions about the filing of project information or about the Public Policy Transmission Planning Process should be addressed to: publicpolicyplanningmailbox@nyiso.com.

Very truly yours,

Henry Chao
Vice President, System & Resource Planning

cc: Mr. Raj Addepalli – State of New York Department of Public Service

Attachment

Western NY Public Policy Transmission Need

Study Cases and Sufficiency Criteria

Study Cases

The baseline and project study cases for the Western NY Public Policy Transmission Need (PPTN) will be based on the NYISO 2014 Comprehensive Reliability Plan base case system representation of 2024 summer peak load, with the following modifications:

- Niagara and Lewiston at full output of 2,700 MW, represented by two dispatch scenarios:
    - Dispatch 1
        a. Niagara 230 kV units (8-13) at full output total = 1,320 MW
        b. Niagara 115 kV units (1-7) dispatch total = 1,140 MW
        c. Lewiston Pumped Storage total = 240 MW
    - Dispatch 2
        a. Niagara 230 kV units (8-13) dispatch total = 920 MW
        b. Niagara 115 kV units (1-7) at full output total = 1,540 MW
        c. Lewiston Pumped Storage total = 240 MW
- Ontario Import to Zone A scheduled at 1,000 MW
- Huntley and Dunkirk generation plants out-of-service
- National Grid Local Transmission Plan (LTP) updates in Zone A:
    - Bypassable 1.532% series reactors on the Packard – Huntley 230 kV lines #77 and #78
    - Two 100 MVAr shunt capacitor banks at Huntley 230 kV station

Sufficiency Criteria (Minimum Criteria)

In order to achieve the environmental, economic, and reliability benefits associated with the Public Policy Requirement as identified by the NYPSC, a sufficient Public Policy Transmission Project or Other Public Policy Project shall obtain full output from Niagara and Lewiston (both Dispatch 1 and Dispatch 2) while maintaining certain levels of simultaneous imports from Ontario and while meeting applicable North American Electric Reliability Corporation (NERC), Northeast Power Coordinating Council (NPCC) and New York State Reliability Council (NYSRC) reliability criteria, and local Transmission Owner planning criteria. Specifically:

- Emergency Transfer Criteria (ETC)
    - Per NYSRC, pre-contingency loading must not exceed normal ratings and post-contingency loading must not exceed short term emergency (STE) ratings for single element contingencies (e.g., loss of a transmission line, transformer, or generating unit). This will be applied to all facilities 115 kV and above.
    - N-1: Ontario import to Zone A of 1,000 MW must be maintained to secure 115 kV and above facilities to STE ratings for single element contingencies.
    - N-1-0 & N-1-1: Following the first contingency loss of a single element, Ontario Import may be reduced to no less than zero and generation, other than Niagara, may be redispatched to return the system to normal ratings (N-1-0) and to secure to STE ratings for single element contingency conditions (N-1-1).

- Normal Transfer Criteria (NTC)
    - Per NYSRC, pre-contingency loading must not exceed normal ratings and post-contingency loading must not exceed long term emergency (LTE) ratings for all design contingencies (e.g., loss of a transmission line, a transformer, a generating unit, two adjacent circuits on a common tower, or multiple circuits that share a common breaker), subject to NYSRC Reliability Rule Exceptions. This also applies following the loss of a critical transmission line, transformer, or generating unit (N-1-1), which will be applied to all facilities 230 kV and above.
    - Per local Transmission Owner planning criteria, 115 kV facilities shall be designed to meet NYSRC Normal Transfer Criteria for first contingency conditions (N-1), and shall be designed to meet NYSRC Emergency Transfer Criteria following the first contingency (N-1-0 & N-1-1).
    - N-1: Ontario import may be reduced to no less than zero to secure facilities 115 kV and above to LTE ratings for all design contingencies.
    - N-1-0 & N-1-1 for 230 kV and above facilities: Following the first contingency loss of a single element, Ontario may be reduced to no less than zero and generation, other than Niagara, may be redispatched to return the system to normal ratings (N-1-0) and to secure to LTE ratings for all design contingency conditions (N-1-1).
    - N-1-0 & N-1-1 for 115 kV facilities: Following the first contingency loss of a single element, Ontario may be reduced to no less than zero and generation, other than Niagara, may be redispatched to return the system to normal ratings (N-1-0) and to secure to STE ratings for single element contingency conditions (N-1-1).

PPTN-specific Project Information and Metrics

A Public Policy Transmission Project or Other Public Policy Project may meet the sufficiency criteria with the Packard – Huntley 230 kV series reactors in-service or bypassed. **For each Public Policy Transmission Project and Other Public Policy Project, the Developer must declare the desired status (in-service or bypassed) of the series reactors as part of the submission of project information.**

For purposes of evaluating the "Cost per MW" metric in the evaluation of Public Policy Transmission Projects, the NYISO will use the incremental Ontario Import capability (MW) that results from each Public Policy Transmission Project.

Baseline Study Results and Cases

Baseline study results are publicly available on the NYISO website at:

http://www.nyiso.com/public/markets_operations/services/planning/planning_studies/index.jsp

The baseline study cases are available, subject to a Critical Energy Infrastructure Information (CEII) request:

http://www.nyiso.com/public/webdocs/markets_operations/services/customer_relations/CEII_Request_Form/CEII_Request_Form_and_NDA_complete.pdf