

**UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY**

National Electric Transmission Congestion Study)

**COMMENTS OF THE
NEW YORK INDEPENDENT SYSTEM OPERATOR**

I. Introduction and Overarching Comments

The New York Independent System Operator (“NYISO”)¹ respectfully submits these comments in response to the Department of Energy’s (“DOE,” “Department”) Public Comment Draft of the National Electric Transmission Congestion Study (the “Study”).² In these comments, the NYISO makes recommendations regarding the data and metrics the Department should consider in identifying congestion on the transmission system generally and in New York specifically. We also provide section-by-section comments on the Study for DOE’s consideration.

The NYISO has five overarching comments. First, the NYISO certainly appreciates the need for any assessment of this nature to have a “lockdown” date beyond which additional or updated information cannot be considered. However, as the Study itself recognizes, the landscape of market, policy and electric system infrastructure (*e.g.*, generating resources, bulk system transmission facilities) is rapidly changing. While the Study qualitatively notes these changes and references additional and updated data sources such as the 2013 update to the NYISO’s Congestion Analysis and Resource Integration

¹ The NYISO is the independent body responsible for providing open-access transmission service, maintaining reliability, and administering competitive wholesale electricity, ancillary services and capacity markets in New York State. The NYISO conducts a Comprehensive System Planning Process pursuant to Attachment Y of the NYISO’s OATT that includes analysis of congestion within the New York Control Area (“NYCA”). The NYISO also conducts an economic planning process and participates in inter-regional planning processes, including analyses of transmission congestion, pursuant to the Northeastern ISO/RTO Planning Coordination Protocol.

² The Department of Energy (DOE) issued the Public Comment Draft of the National Electric Transmission Congestion Study on August 20, 2014 and requested comments by October 20, 2014.

Study (CARIS), DOE states in the Study that it is constrained by its study period (*i.e.*, through 2012 with limited updates in 2013) from presenting the CARIS update. This is a significant limitation on the utility of this congestion study. Moreover, any subsequent deliberations on whether or not to designate “National Corridors” should be required to consider the latest developments in state and federal policy, market rules, and system infrastructure as well as the most recent sources for data on transmission constraints and congestion.

Second, as NYISO has advised in its comments on previous DOE Congestion Reports, transmission congestion should be measured by its actual impact on energy markets, and not by gross congestion. Markets provide various opportunities to hedge congestion, including bilateral contracts, grandfathered transmission rights, and financial transmission right (FTR) markets like the NYISO’s Transmission Congestion Contracts (TCC) market. Therefore, “congestion rent,” which represents only the billing cost of congestion, should not be relied upon in future analyses of congestion. The NYISO believes that the proper measurement of the impact of congestion on the electric transmission system is actual bid production cost savings. The difference in bid production cost between a constrained system and an unconstrained system is the proper metric to measure congestion because it measures the true resource cost impact on society.

Third, the NYISO appreciates that the Study notes the diversity across regions and individual bulk transmission systems in their ability to manage large-scale changes in system resource mixes due to state and federal policies such as Renewable Portfolio Standards (RPS). As noted in the Study (e.g., page 22), New York’s bulk transmission system can manage approximately 8,000 MWs of wind resources without major bulk

power system transmission upgrades. Therefore, congestion on the bulk transmission system is not an impediment to New York State reaching its RPS goals.

Fourth, the NYISO appreciates the Study's references to regional market initiatives implemented, and being developed, between New York, ISO-NE, and PJM. The broader coordination of regional market transactions (under the umbrella of the Broader Regional Markets initiative) is a major move forward in resolving the impact of varying market rules on system congestion in the Northeast.

Fifth, and finally, the NYISO appreciates the Study's discussion of recent regulatory proceedings in New York designed to expand the bulk transmission system to address economic and reliability concerns that, if realized, will result in reduced system congestion [*i.e.*, pages 67-68 of the Study]. The Study would be made more informative if it included the latest updates on these proceedings. Specifically, in the Indian Point (IP) contingency plan proceedings, the New York Public Service Commission (PSC) has authorized the New York Transmission Owners to proceed with construction of certain Transmission Owners Transmission Solutions ("TOTS"), consisting of three upgrades: (i) Staten Island unbottling, (ii) Marcy South series compensation and Fraser to Coopers Corners reconductoring, and (iii) Ramapo to Rock Tavern second 345kV line. In another PSC initiative, the AC Transmission Proceeding, the PSC has established new procedures for a comparative evaluation of proposed AC transmission projects in a combined siting proceeding and to determine which projects should be built and obtain cost recovery. Although the specific projects ultimately considered in the proceeding may be modified, four developers filed five transmission siting applications at the PSC on October 1, 2013.

The NYISO has included, as Appendix A to these comments, two maps (Figures 1 and 2) which depict the projects associated these proceedings.

We look forward to continuing to work with the DOE on future congestion studies and appreciate the opportunity to comment on the Study. Below the NYISO provides additional detailed comments and suggested textual edits and additions, by Study section and page number.

II. Specific Comments

1. Executive Summary

Bottom of page xi:

From the text: “Jointly, these conditions establish a specific level or limit -- as in (2) -- to maximum permissible flow over the affected element(s), in order to comply with reliability rules and standards established to ensure that the grid is operated in a safe and secure manner.”

Comment: “Maximum” appears to be redundant.

Replacement text: “Jointly, these conditions establish a specific level or limit -- as in (2) -- to the permissible flow over the affected element(s), in order to comply with reliability rules and standards established to ensure that the grid is operated in a safe and secure manner.”

Top of page xiii:

Textual edit: “This study’s assessment of current conditions does not capture the full value that may be provided by mitigating the congestion identified, because congestion solutions typically bring multiple benefits over a long time horizon – such as reliability improvement, more efficient generation dispatch, increased usage of ~~variable~~ **renewable** resources, or lower customer bills ~~from energy efficiency implemented~~ on the load-side of a congested path– beyond the congestion reduction benefit.”

Bottom of xiii:

Textual edit: “Second, it leads to projections of costs and benefits that are generally **derived from** ~~on~~ extrapolations drawn from recent experiences.”

Bottom of xiv/top of xv:

From the text: “Large ‘queues’ of proposed generation projects seeking interconnection studies by relevant regional or sub-regional grid planning authorities. See Figures ES-3 and ES-4 for maps of such queues. When the aggregate capacity in the queues is larger than available or projected transmission capacity connecting it to load regions, it is an indication that transmission may be or will become constrained depending on how many of these projects materialize and how capacity interconnection and energy delivery is pursued. (Some proposed projects may never reach commercial viability.)”

Comment: Large interconnection queues are not a reliable indicator that transmission is or will become more constrained. Footnote 6 recognizes that FERC policy requires generators seeking interconnection to be responsible for transmission upgrades—which typically address both reliability and economic concerns. We would agree that that the presence of lower cost resources upstream of historic transmission constraints could be an indicator of increased congestion as those resources are interconnected to the grid. Alternatively, a large volume of lower cost resources being connected downstream of the constraints (in response to market signals -- higher energy or capacity prices) could indicate the potential lowering of future congestion costs. The Study should clearly reflect the fact that the location of new lower cost resources can lead to increased *or decreased* congestion.

Bottom of page xviii (footnote 7):

Comment: Please correct “NYSIO” to read “NYISO.”

Bottom of page xxii (footnote 13):

Comment: Please correct “NYSIO” to read “NYISO.”

Top of page xxv:

From the text: “The Department believes that new authorization may assist in structuring and guiding this data collection and data-sharing process, and is considering the development of a legislative proposal on this subject.”

Comment: An approach more fruitful than seeking a change in federal law may be for DOE to conduct a more robust stakeholder process, which could include an input phase in which all entities are publicly asked by DOE to provide their recommendations for sources of input data on transmission congestion that would provide useful information for consideration of the need for future transmission development. The NYISO understands that the DOE intends to continue the publication of an Annual Transmission Data Report ³

³ United States Department of Energy (2014). *Transmission Constraints and Congestion in the Western and Eastern Interconnections, 2009-2012*, January 2014, at <http://energy.gov/sites/prod/files/2014/02/f7/TransConstraintsCongestion-01-23-2014%20.pdf>.

and suggests that this Report may provide a forum for such a dialogue. The NYISO relies on a collaborative study process including data inputs in carrying out its planning analyses.

2. Introduction and Overview

Bottom of page 7:

Textual edit: “This study’s assessment of current conditions does not capture the full value that may be provided by mitigating the congestion identified, because congestion solutions typically bring multiple benefits over a long time horizon – such as reliability improvement, more efficient generation dispatch, increased usage of ~~variable~~ **renewable** resources, or lower customer bills ~~from energy efficiency implemented~~ on the load-side of a congested path – beyond the congestion reduction benefit.”

3. Transmission Constraints and Congestion: Concepts, Measurement, and Sources of Publicly Available Data

Bottom of page 10:

From the text: “Jointly, these conditions establish a specific level or limit -- as in (2) -- to maximum permissible flow over the affected element(s), in order to comply with reliability rules and standards established to ensure that the grid is operated in a safe and secure manner.”

Comment: “Maximum” appears to be redundant.

Replacement text: “Jointly, these conditions establish a specific level or limit -- as in (2) -- to the permissible flow over the affected element(s), in order to comply with reliability rules and standards established to ensure that the grid is operated in a safe and secure manner.”

Top of page 14:

From the text: “The Department believes that new authorization may assist in structuring and guiding this data collection and data-sharing process, and is considering the development of a legislative proposal on this subject.”

Comment: An approach more fruitful than seeking a change in federal law may be for DOE to conduct a more robust stakeholder process, which could include an input phase in which all entities are publicly asked by DOE to provide their recommendations for sources of input data on transmission congestion that would provide useful information for consideration of the need for future transmission development. The NYISO understands

that the DOE intends to continue the publication of an Annual Transmission Data Report ⁴ and suggests that this Report may provide a forum for such a dialogue. The NYISO relies on a collaborative study process including data inputs in carrying out its planning analyses.

4. Recent Nation-Wide Trends Affecting Transmission Constraints and Congestion

Bottom of Page 19/Top of Page 20:

From the text: “At the state level, 20 states have implemented energy efficiency resource standards that require reduction in electricity sales or demand by a certain year. (Seven states have goals which target certain levels of reductions, but do not require them.) The states with standards and goals are shown in the map below.”

Comment: While the NYISO recognizes that FERC is currently engaged with federal courts on the future of jurisdiction over Demand Response programs, the Study should not overlook the important developments and expansions in demand response (“DR”) programs administered by ISOs and RTOs, and expanding participation in DR markets. DOE should add a full discussion of DR under FERC programs. For ISO/RTO DR program data see:

http://www.isorto.org/Documents/Report/20140304_2013NorthAmericanWholesaleElectricityDemandResponseProgramComparison.xlsx

Textual addition: “The New York Independent System Operator, Inc. (“NYISO”) offers two DR programs that support reliability: the Emergency Demand Response Program (“EDRP”) and the Installed Capacity-Special Case Resource Program (“ICAP/SCR”). In addition, DR resources may participate in the NYISO’s energy market through the Day-Ahead Demand Response Program (“DADRP”), or the Ancillary Services market through the Demand-Side Ancillary Services Program (“DSASP”).”

Middle of Page 22:

Textual edit: “In New York, for instance, a study finds the existing high voltage transmission system can accommodate up to 68 GW.”

5. Transmission Congestion and Constraints in the Western Interconnection - No Comments

6. Transmission Congestion and Constraints in the Eastern Interconnection

⁴ United States Department of Energy (2014). *Transmission Constraints and Congestion in the Western and Eastern Interconnections, 2009-2012*, January 2014, at <http://energy.gov/sites/prod/files/2014/02/f7/TransConstraintsCongestion-01-23-2014%20.pdf>.

Bottom of page 51 (footnote 107):

Textual edit: “NYSIO” should read “NYISO.”

Top of page 60 (footnote 7, in text box):

Textual edit: “describe above” should read “described above.”

Top of page 66:

Textual edit: “**For the period May 2012-April 2013**, Locational Minimum Installed Capacity Requirements ~~are~~ **were** set at 83.0% of New York City’s forecast peak load and 99.0% for Long Island.”

Middle of page 66:

From the text: “During the time period covered by this report, six generating facilities in New York state with summer capability of 307 MW have been retired,¹³⁷ and more retirements have been announced (NRG’s four coal-fired Dunkirk units totaling 635 MW, scheduled for shutdown by September 2012, with AES Corp.’s upstate Westover and Greenridge coal units, totaling 287MW, moved to inactive status).”

Comment: The NYPSC has approved a plan for three of the four Dunkirk units to be refueled as gas/coal units. There are also plans for the Greenidge [*note the corrected spelling*] plant to return to service. Given the uncertainty as to the status of specific units with respect to retirement, mothball and return to service, it may be prudent to omit references to specific units in this section and simply refer the reader to the NYISO “Gold Book.” In the alternative the DOE may wish to footnote the current status of the units cited.

Bottom of page 68 (footnote 150):

From text: “See New York PSC Case 12-T-0502 and Case 12-E-0503.”

Comments: There are a total of 7 dockets in this proceeding.

Replacement text: See New York PSC Case Nos. 12-T-0502, 13-T-0488, 13-T-0454, 13-T-0455, 13-T-0456, 13-T-0457, 13-T-0461.

Bottom of page 84 (footnote 205):

Textual edit: “NYSIO” should read “NYISO.”

7. Public Comment Process and Next Steps

Page 86

From the text: “The Department is particularly interested in comments on the reliance on publicly available data to assess congestion and transmission constraints.”

Comment: The NYISO believes that there is value in the collection of public data on the nationwide transmission system and suggests that the DOE’s Annual Transmission Data Report may be an appropriate vehicle for such information. The NYISO itself relies on a collaborative study process including data inputs in carrying out its planning analyses.

Bottom of Page 87:

From the text: Does the Congestion Study continue to serve a useful purpose in informing the national discussion of transmission infrastructure needs? Should the scope and process for conducting such studies be modified to better serve this objective?

Comment: As noted above, the NYISO believes that there is value in the collection of public data on the nationwide transmission system and suggests that the DOE’s Annual Transmission Data Report may be an appropriate vehicle for such information. The NYISO itself relies on a collaborative study process including data inputs in carrying out its planning analyses. The NYISO would, however, reiterate its recommendation that the proper measurement of congestion on the electric transmission system is actual bid production cost savings and not gross congestion rent, which does not factor in the effects of financial hedging and other measures that already ameliorate the effects of congestion.

Respectfully Submitted,

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Appendix A

MAPS depicting projects associated with New York Energy Highway proceedings

Figure 1: Energy Highway Indian Point Contingency Plan (TOTS)

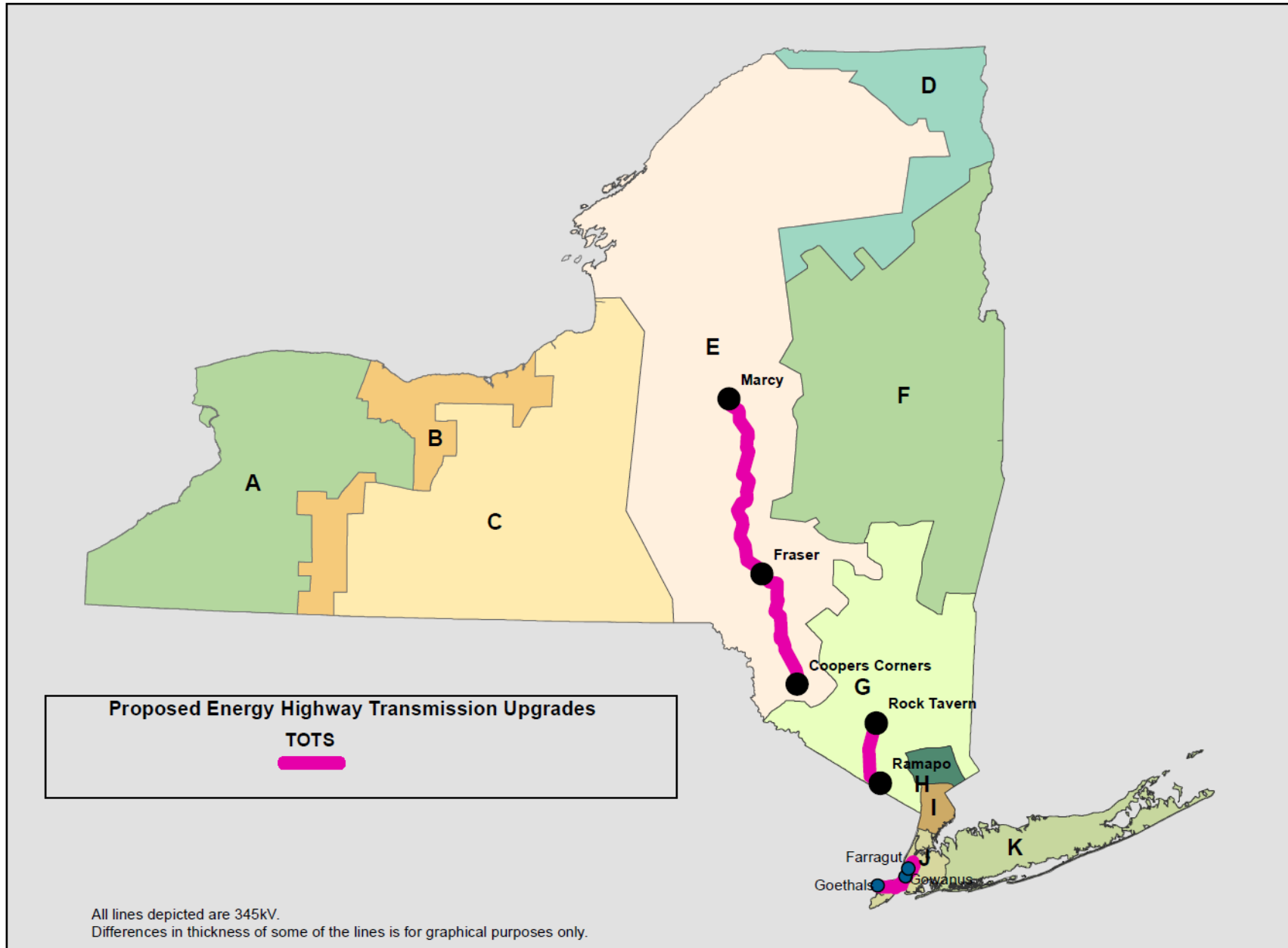


Figure 2: Energy Highway AC Transmission Portfolios

