

AC Transmission Public Policy Transmission Need Viability and Sufficiency Assessment

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> ESPWG/TPAS September 26, 2016

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Public Policy Process

- Section 31.4 of Attachment Y of the NYISO Open Access Transmission Tariff (OATT) describes the planning process that the NYISO, and all interested parties, shall follow to consider needs for new transmission projects on the Bulk Power Transmission Facilities (BPTFs) that are driven by Public Policy Requirements.
- A Public Policy Requirement is a federal or New York State statute or regulation, including a New York State Public Service Commission (PSC) order adopting a rule or regulation subject to and in accordance with the State Administrative Procedure Act, any successor statute, or any duly enacted law or regulation passed by a local governmental entity in New York State, that may relate to transmission planning on the BPTFs.

Public Policy Process

Phase I: Identify Needs and Assess Solutions

- PSC identifies transmission needs driven by Public Policy Requirements and defines sufficiency criteria
- NYISO solicits solutions (transmission, generation, or EE/DR)
- NYISO evaluates viability and sufficiency of all solutions
- PSC reviews Viability and Sufficiency Assessment and confirms continued transmission need

Phase II: Transmission Evaluation and Selection

- NYISO evaluates viable and sufficient transmission solutions to identify the more efficient or cost-effective solution
- NYISO Board may select a transmission solution for purposes of cost allocation and recovery under the NYISO Tariff

Identification of the Needs

- August 1, 2014 NYISO issued a letter inviting stakeholders and interested parties to submit proposed transmission needs driven by Public Policy Requirements
- October 3, 2014 NYISO submitted the proposed needs to the PSC
- September 22, 2015 DPS staff issued a final report in the PSC's AC Transmission proceedings recommending new transmission facilities across Central East and UPNY/SENY interfaces.
- December 17, 2015 the PSC issued an order addressing Public Policy Requirements and identifying the AC Transmission Public Policy Transmission Need (PPTN).

AC TRANSMISSION PPTN

- Segment A (Central East)
 - New Edic/Marcy to New Scotland 345 kV line
 - Decommission Porter to Rotterdam 230 kV lines 230/345 kV connection to Rotterdam

Segment B (UPNY/SENY)

Lake

Erie

- New Knickerbocker to Pleasant Valley 345 kV line
- Rock Tavern substation terminal upgrades
- Shoemaker Sugarloaf 138 kV line
- See PSC Order for full description



Sufficiency Criteria

For all solution types

- For Segment A, increase Central East normal transfer limit by at least 350 MW
- For Segment B, increase UPNY/SENY normal transfer limit by at least 900 MW

For transmission solutions

- Must include all Segment A or Segment B components
- No crossing of Hudson River
- No acquisition of new permanent rights-of-way, except for de minimis acquisitions
- Costs not to exceed level estimated by the PSC if the proposed project was evaluated in AC Transmission proceedings

Sufficiency Base Case

- Same base case as that used in the AC Transmission proceedings before the PSC
 - 2014 NYISO Comprehensive Reliability Plan baseline representation for 2019
 - Modified to include the CPV Valley Energy Center generation plant and associated system deliverability upgrades

Sufficiency Baseline Limits

- Central East
 - Normal Transfer Limit: 2,725 MW (voltage)
 - Contingency: Marcy South tower (Lines 40 & 41)
- UPNY/SENY
 - Normal Transfer Limit: 5,113 MW (thermal)
 - Limiting Element: Leeds Pleasant Valley 345 kV
 - Limiting Contingency: Common-tower loss of CPV Rock Tavern and Coopers Corners – Rock Tavern 345 kV (Lines 34 & 42B)
- See the NYISO's October 8, 2015 AC Transmission Technical Conference presentation for further details

Solicitation of Solutions

- February 5, 2016 NYISO presented at ESPWG/TPAS to review the AC Transmission PPTN, and the associated models and assumptions to be used in NYISO's evaluations.
- February 29, 2016 NYISO issued a solicitation for Public Policy Transmission Projects and Other Public Policy Projects to address the AC Transmission PPTN
- March 30, 2016 NYISO issued FAQ
- April 13, 2016 NYISO issued additional FAQ
- April 29, 2016 Six Developers submitted 16 project proposals

Proposed Projects

Developer	Project Name	Category	Туре	Location	Size	
National Grid / Transco New York Energy Solution Sec		PPTP	AC Transmission	Segment A	N/A	
National Grid / Transco	New York Energy Solution Seg. B	PPTP	AC Transmission	Segment B	N/A	
NextEra Energy Transmission New York	Enterprise Line: Segment A	PPTP	AC Transmission	Segment A	N/A	
NextEra Energy Transmission New York	Enterprise Line: Segment B	PPTP	AC Transmission	Segment B	N/A	
NextEra Energy Transmission New York	Enterprise Line: Segment B-Alt	PPTP	AC Transmission	Segment B	N/A	
North America Transmission / NYPA	Segment A +765 kV	PPTP	AC Transmission	Segment A	N/A	
North America Transmission / NYPA	Segment A Base	PPTP	AC Transmission	Segment A	N/A	
North America Transmission / NYPA	Segment A Double Circuit	PPTP	AC Transmission	Segment A	N/A	
North America Transmission / NYPA	Segment A Enhanced	PPTP	AC Transmission	Segment A	N/A	
North America Transmission / NYPA	Segment B Base	PPTP	AC Transmission	Segment B	N/A	
North America Transmission / NYPA	Segment B Enhanced	PPTP	AC Transmission	Segment B	N/A	
ITC New York Development	16NYPP1-1A AC Transmission	PPTP	AC Transmission	Segment A	N/A	
TC New York Development	16NYPP1-1B AC Transmission	PPTP	AC Transmission	Segment B	N/A	
AvanGrid	Connect New York Recommended	PPTP	HVDC	Segments A and B	1000 MW	
AvanGrid	Connect New York Alternative	PPTP	HVDC	Segments A and B	1000 MW	
GlidePath	Distributed Generation Portfolio	OPPP	Generation	Orange, Ulster, Putnam, Greene, NY	112 MW	

PPTP: Public Policy Transmission Project

OPPP: Other Public Policy Project

Project Findings

					Meets ROW	Meets					
					Acquisition	Hudson	Meets	Central	UPNY-SENY		
			Includes All	Includes All	Criterion	River	Cost	East Limit	Limit		
			Segment A	Segment B	Except For	Crossing	Estimate	Increases	Increases		
Developer Name	Project Name	Segment	Components?	Components?	de minimis?	Criterion?	Criterion?	350+ MW ?	900+ MW ?	Sufficient?	
National Grid / Transco	New York Energy Solution Seg. A	A	Yes	N/A	Yes	Yes	Yes	Yes	N/A	Yes	
NextEra Energy Transmission New York	Enterprise Line: Segment A	А	Yes	N/A	Yes	Yes	N/A	Yes	N/A	Yes	Į
North America Transmission / NYPA	Segment A +765 kV	А	Yes	N/A	Yes	Yes	N/A	Yes	N/A	Yes	Į
North America Transmission / NYPA	Segment A Base	A	Yes	N/A	Yes	Yes	N/A	Yes	N/A	Yes	
North America Transmission / NYPA	Segment A Double Circuit	А	Yes	N/A	Yes	Yes	N/A	Yes	N/A	Yes	
North America Transmission / NYPA	Segment A Enhanced	А	Yes	N/A	Yes	Yes	N/A	Yes	N/A	Yes	
ITC New York Development	16NYPP1-1A AC Transmission	А	Yes	N/A	Yes	Yes	N/A	Yes	N/A	Yes	
National Grid / Transco	New York Energy Solution Seg. B	В	N/A	Yes	Yes	Yes	Yes	N/A	Yes	Yes	
NextEra Energy Transmission New York	Enterprise Line: Segment B	В	N/A	Yes	Yes	Yes	Yes	N/A	Yes	Yes	
NextEra Energy Transmission New York	Enterprise Line: Segment B-Alt	В	N/A	Yes	Yes	Yes	Yes	N/A	Yes	Yes	
North America Transmission / NYPA	Segment B Base	В	N/A	Yes	Yes	Yes	N/A	N/A	Yes	Yes	
North America Transmission / NYPA	Segment B Enhanced	В	N/A	Yes	Yes	Yes	N/A	N/A	Yes	Yes	
ITC New York Development	16NYPP1-1B AC Transmission	В	N/A	Yes	Yes	Yes	N/A	N/A	Yes	Yes	
AvanGrid	Connect New York Recommended	A and B	No	No	Yes	No	N/A	Yes	No	No	Į
AvanGrid	Connect New York Alternative	A and B	No	No	Yes	Yes	N/A	Yes	No	No	J
GlidePath	Distributed Generation Portfolio	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	J

Conclusions

13 projects are viable and sufficient

- National Grid / Transco New York Energy Solution Segment A
- National Grid / Transco New York Energy Solution Segment B
- NextEra Energy Transmission New York Enterprise Line: Segment A
- NextEra Energy Transmission New York Enterprise Line: Segment B
- NextEra Energy Transmission New York Enterprise Line: Segment B Alt.
- North America Transmission / NYPA Segment A + 765 kV
- North America Transmission / NYPA Segment A Base
- North America Transmission / NYPA Segment A Double Circuit
- North America Transmission / NYPA Segment A Enhanced
- North America Transmission / NYPA Segment B Base
- North America Transmission / NYPA Segment B Enhanced
- ITC New York Development 16NYPP1-1A AC Transmission
- ITC New York Development 16NYPP1-1B AC Transmission

Comments

- October 3, 2016 Comments on the Viability & Sufficiency Assessment due to the NYISO
 - Submit comments with subject line "AC Transmission PPTN VSA comments" to: <u>PublicPolicyPlanningMailbox@nyiso.com</u>
- Mid October 2016 NYISO will publish and submit to the PSC the final Viability & Sufficiency Assessment

Next Steps

- PSC reviews the Viability & Sufficiency Assessment
- PSC will issue an order, in accordance with the State Administrative Procedure Act, explaining whether there continues to be a transmission need driven by a Public Policy Requirement.
- If PSC confirms need for transmission, the NYISO will continue to evaluate transmission solutions to the AC Transmission Public Policy Transmission Need.
- Within 15 Calendar Days following the PSC's issuance of an order finding a continued need for transmission, Developers must provide notice of their intent to proceed with the evaluation of their viable and sufficient projects.

The mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefit to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system

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