Updated Straw Proposal to Address Upgrades in the Public Policy Transmission Planning Process

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Agenda

- Revised Straw Proposal
- Definition of Upgrade
- Next Steps



Background

| Date | Working Group | Discussion points and links to materials |
|----------------|-----------------------|--|
| 2018- 12-19 | ESPWG/TPAS | Necessary Local Upgrades for Public Policy Transmission Need projects by Indicted Transmission Owners (Central Hudson Gas & Electric, ConEd, National Grid, NYSEG, O&R, and RG&E) |
| 2019- 04-12 | ESPWG/TPAS | Straw Proposal to Address Non-BPTF Upgrades in the Public Policy Transmission Planning Process and Establish a Procedure to Administer Section 31.6.4 of Attachment Y by the NYISO |
| 2019- 05-21 | ESPWG/TPAS | Updated Straw Proposal to Address Upgrades in the Public Policy Transmission Planning Process by the NYISO |
| 2019- 08-20 | ESPWG/TPAS/ ICAPWG | Updated Straw Proposal to Address Upgrades in the Public Policy Transmission Planning Process by the NYISO |

Revised Straw Proposal



Feasibility/Constructability Evaluation of Upgrades

- NYISO will perform sensitivities, as appropriate, to account for the Public Policy Transmission Need case when performing the required analyses
- Revise the scope of the feasibility/constructability analyses in the optional Feasibility Study and System Impact Study under Attachment P for upgrades proposed or related to Public Policy Transmission Projects to study the feasibility/constructability as it relates to the local transmission system
 - Analyzes not only where the upgrade proposes to interconnect but also the feasibility/constructability of the upgrade itself
- Include tariff requirement for applicable Transmission Owner staff to execute a non-disclosure agreement when performing the expanded analysis in the SIS



Feasibility/Constructability Evaluation of Upgrades

- Revise the SIS study to make it into two distinct parts for Public Policy Transmission Projects and use one part of the SIS as an input into the NYISO's evaluation and selection
 - Part 1 of the SIS will include the identification of potential feasibility/constructability concerns and necessary Network Upgrade Facilities to reliably interconnect the project
 - Part 1 will be used as an input into NYISO's evaluation and selection in the Public Policy Transmission Planning Process
 - NYISO's consultant will prepare independent costs estimate for the identified Network Upgrade Facilities and any risks identified with the feasibility/constructability of an upgrade
 - Part 2 of the SIS will include the good faith cost estimate for the identified NUFs and be included in the final SIS report
 - NYISO's evaluation and selection in the Public Policy Transmission Planning Process would proceed in parallel, thereby reducing the potential for delay



Assignment Process for Upgrades

- NYISO proposes to clarify the various types of components in a Public Policy Transmission Project for purposes of the assignment process and eliminate discrepancies between the public policy evaluation and the Transmission Interconnection Procedures
- Revisions would be made to the tariff and in the project submittal form in the PPTPP Manual requiring Developers to specify components of its project as follows:
 - New transmission facilities to achieve the Public Policy Transmission Need,
 - Upgrades that a Developer proposes to achieve the Public Policy Transmission Need (includes those directed by the New York State Public Service Commission ("PSC") for a Public Policy Transmission Need),
 - Potential Network Upgrade Facilities ("potential NUFs"), which are interconnection facilities and system upgrades
 that a Developer believes will be necessary to reliably interconnect the proposed transmission project to the New
 York State Transmission System pursuant to the Transmission Interconnection Standard.
- New transmission facilities and Upgrades are considered to be part of the project for purposes of the evaluation and cannot be modified by the Developer or the NYISO, while potential NUFs will be modified based upon the results from the NYISO-conducted interconnection studies



Assignment Process for Upgrades

- NYISO proposes to establish a process by which it will consider the facility characterizations provided in a Developers' proposal and identify components of a project that are eligible to be assigned to a Transmission Owner (*i.e.*, satisfying the definition of Upgrade)
- The new facilities will be automatically assigned to the proposing Developer of the selected project
- Proposed procedure for assignment of Upgrades:
 - 1) No later than 30 calendar days before the NYISO's presentation of the Viability and Sufficiency Assessment to stakeholders, the NYISO will post the components that NYISO identified as eligible to be assigned to a Transmission Owner to the Transmission Owner(s) owning the facility(ies)
 - Eligible components of a proposed project will be those that meet the definition of an Upgrade, including NUFs
 - The list of eligible components that is provided to the Transmission Owner will not be associated the specific project
 - 2) Each applicable Transmission Owner must notify the NYISO, in writing, within 15 calendars days of the posting of the final Viability and Sufficiency Assessment as to whether it elects to be the Assigned Developer of that component
 - If the Transmission Owner elects to be the Assigned Developer, the NYISO will consider that in the evaluation and selection of the proposals with respect to, among other metrics, cost estimates and cost containment measures (*i.e.*, the SECO independent cost estimate shall apply to the Upgrades assigned to a Transmission Owner)
 - If Transmission Owner declines the eligible component, the NYISO will consider it to be developed, constructed, and owned by the proposing Developer and will apply the cost containment measures, as applicable

Assignment Process for Upgrades

Proposed procedure (continued):

- 3) If a Transmission Owner elects an eligible component and the project containing such component is selected by the Board, the Transmission Owner would:
 - be bound by the decision and be treated as an Assigned Developer for the elected Upgrade,
 - enter into a Public Policy Transmission Planning Process Development Agreement for the elected Upgrade for the selected project,
 - participate in the Facilities Study for the selected project as a co-sponsoring "Transmission Developer" with the proposing Developer or initiate a new Transmission Interconnection Application for the elected Upgrade, and
 - have the opportunity to recover the costs for the selected project under Rate Schedule 10, as a well as a reasonable rate of return, for the elected Upgrade.
- 4) The NYISO will inform the Developers of the Transmission Owner elections and the Developers will have an opportunity to consider the elections in deciding whether to proceed with the further evaluation of their proposed projects pursuant to Section 31.4.6.6



Developers could propose projects of new and upgrades on the existing facilities, but should understand that upgrades to the existing facilities would be assigned to the TOs first unless they decline. NYISO review the project proposal for 1) consistency of applications between the interconnection and PPTPP, 2) project elements (new vs. upgrades), and 3) identify the Connecting TOs **Public Policy Transmission Planning Process** Interconnection Process NYISO conducts V&S NYISO conducts System Impact Studies in the Interconnection Process NYISO Posts List of TO identifies reliability violations & concerns of Upgrades feasibility/constructability of upgrades to existing transmission facilities In consultation with the TO, NYISO identifies the NYISO Presents V&S and required NUFs TOs Offered Assignment of Upgrades Upgrades NYISO, in consultation with TO, prepares good faith New Facilities cost estimates of NUFs for the SIS and completes the study TO offered assignment of Upgrade -Decline-NYISO conducts the Facilities Studies in Developer is consultation with the TO Elect assigned the facilities TO is assigned the elected NYISO, TO, and the Developers negotiate and Upgrades execute the Interconnection Agreement NYISO Informs Developer of TO election, and Developer elects whether to proceed with evaluation By NYISO NYISO evaluates and selects By Connecting TO By Developer NYISO negotiates and executes the Development Agreements with the Assigned Developers



Definition of "Upgrade"



NYISO Current Definition of Upgrade

Section 31.6.4 defines an upgrade as:

an improvement to, addition to, or replacement of a part of an existing transmission facility and shall not refer to an entirely new transmission facility.



Definition of Upgrade in Other Regions

- Following ISOs/RTOs, among others, have a similar definition as the NYISO:
 - PJM
 - CAISO
 - ISO-NE
 - Florida
 - SPP
- MISO is the only ISO/RTO that added a greater level of specificity in defining "upgrades"



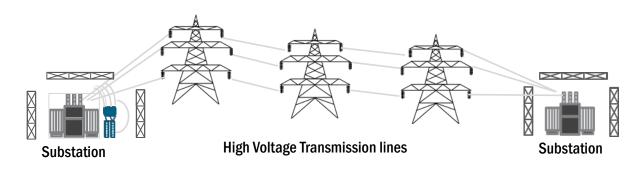
Conceptual Definition of "Upgrade"

- "Upgrade" includes:
 - any improvement to an existing transmission facility,
 - addition to an existing transmission facility,
 - replacement of a part of an existing transmission facility,
 - relocation of an existing transmission facility, or
 - decommission of an existing transmission facility;

provided, however, that the proposal is not an expansion of the New York State Transmission System that adds a new electrical pathway(s) or functionality that did not exist prior to the expansion or that functions electrically independent from existing transmission facilities.

 Tariff language will include expanded detail for transmission facilities and substations.

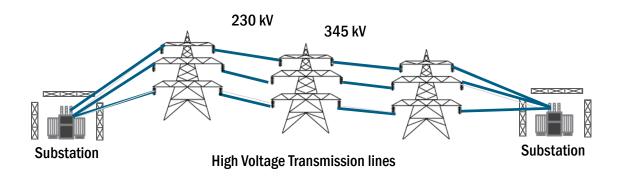
Example 1: Increase the rating of a 345 kV line by replacing an existing wavetrap



Upgrade, as it is an improvement to an existing transmission facility or a replacement of a part of an existing transmission facility



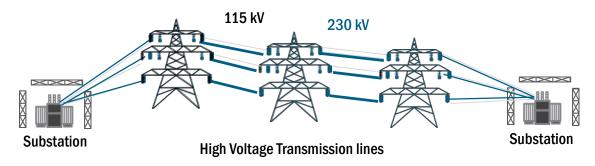
Example 2: Reconductor an existing 230 kV transmission line with a 345 kV conductor on the existing structures with same substations



Upgrade, as this is an improvement to an existing transmission facility by increasing the nominal voltage



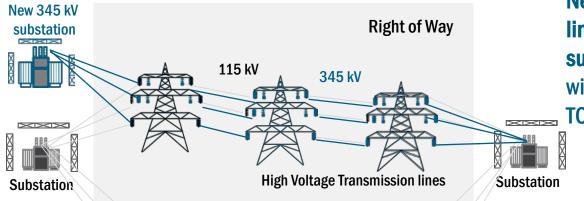
Example 3: Replace an existing 115kV transmission line with a 230 kV transmission line by removing the existing 115 kV line and rebuilding a 230 kV line on new structures, new insulators, etc. in the same right-of-way with same substations



Upgrade, as this is an improvement to an existing transmission facility by increasing the nominal voltage



<u>Example 4:</u> Relocate an existing 115 kV transmission line to alternative right-of-way (ROW) in order to accommodate a new 345 kV transmission line originating from a new substation



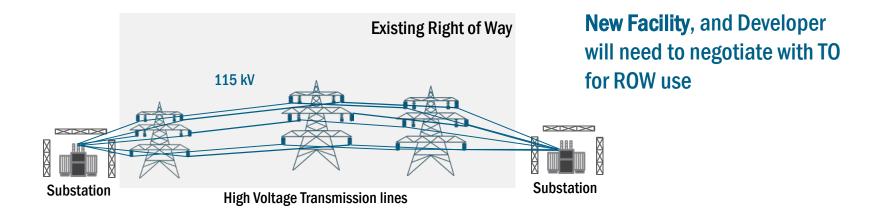
New Facility = new 345 kV line, towers, and substation, and Developer will need to negotiate with TO for ROW use

Upgrade = relocated 115 kV as well as any added ROW to accommodate facility

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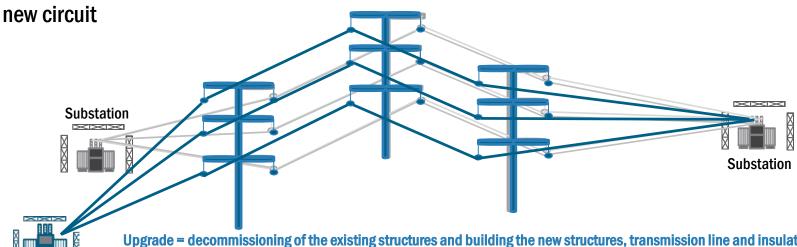
Alternative Right of Way

Example 5: Build a new 115 kV transmission line and new structures in an existing ROW





Example 6: Co-locate a new 345 kV circuit originating from a new substation on an existing single-circuit transmission line with structures that cannot be expanded to accommodate the



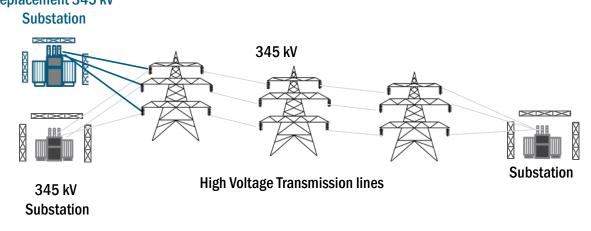
New 345 kV substation

Upgrade = decommissioning of the existing structures and building the new structures, transmission line and insulators for existing circuit, associated protective relay schemes for existing circuit, shield wires, and additional ROW

New Facility = transmission line and insulators for new circuit and associated protective relay schemes for new circuit, as well as the new 345 kV substation

^{*}Note: would require co-location agreement

Example 7: Relocate an existing substation to accommodate a proposed project by building a new 345 kV substation near the existing substation and routing all transmission circuits from the existing substation into the replacement substation and removing the existing substation Replacement 345 kV



Upgrade = relocated 345 kV substation and removal of existing substation



Next Steps



Next Steps

- The NYISO plans on returning to the ESPWG/TPAS in September 2019 for further discussion
- Please submit any questions or comments to PublicPolicyPlanningMailBox@nyiso.com



Questions?



The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits 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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