

Lessons Learned Kick-off: Western NY Public Policy Transmission Planning Process

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NEW YORK INDEPENDENT SYSTEM OPERATOR

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We appreciate the suggestions and comments that stakeholders have submitted up-to-date.

Please submit comments to: PublicPolicyPlanningMailbox@nyiso.com



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Lessons Learned Process

Stakeholders provide suggestions on how to improve the Public Policy Transmission Planning Process



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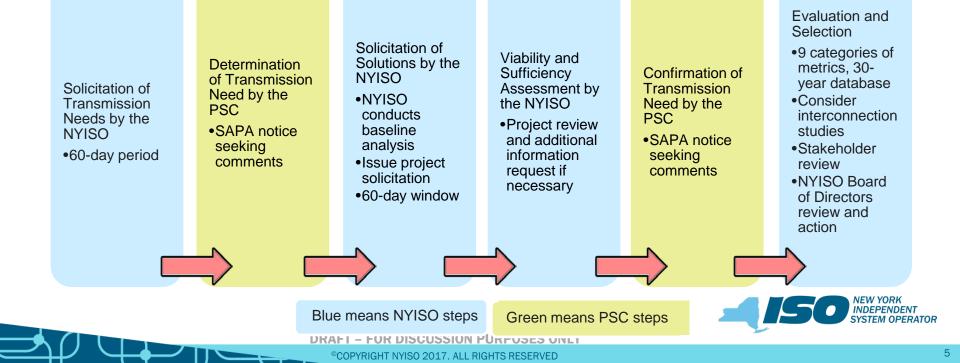
Stages for implementation

- Suggestions that can be implemented immediately or in the near future will be implemented in the AC Transmission Need evaluation and selection phase
- Suggestions that require manual updates or tariff revisions will be addressed as part of 2018 Comprehensive System Planning Process Review
- Suggestions for future consideration will be considered after further discussion with stakeholders, while suggestions that won't be implemented in the near future could be tracked for future revisions

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Public Policy Transmission Planning Process



WNY PPTN Timeline

| Major Process Segment | Responsible Entity | Process Step | Date Complete | Months |
|--|-----------------------|---|---------------|--------|
| Solicitation of Transmission Needs | NYISO | Start Public Policy Planning Cycle: request needs | 8/1/2014 | 2 |
| | | Proposed needs due; filed with PSC | 9/30/2014 | |
| Determination of Transmission Need | PSC | SAPA comments due | 12/30/2014 | 10 |
| | | Second SAPA notice specific to Western NY | 4/3/2015 | |
| | | SAPA comments due | 5/18/2015 | |
| | | PSC PPTN Order | 7/20/2015 | |
| Solicitation of Solutions | NYISO | Baseline analysis to identify transmission issues | 10/29/2015 | 5 |
| | | Issue solicitation for solutions | 11/1/2015 | |
| | | Solution proposals due | 12/31/2015 | |
| Viability and Sufficiency Assessment | NYISO | Perform Viability & Sufficiency Assessment | 4/30/2016 | 5 |
| | | Stakeholder review | 5/12/2016 | |
| | | Final Viability & Sufficiency Assessment filed with PSC | 5/31/2016 | |
| Confirmation of Transmission Need | PSC | PSC issued SAPA notice | 6/22/2016 | 5 |
| | | SAPA comments due | 8/8/2016 | |
| | | PSC confirming order | 10/13/2016 | |
| Evaluation and Selection | NYISO | Evaluate transmission solutions and issue draft report | 6/30/2017 | 12 |
| | | Stakeholder review | 9/27/2017 | |
| | | Board review and action | 10/17/2017 | |



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WNY Statistics

• Proposals

- 15 proposals, over 300 pages for most proposals
- About 3 GB of documents and data

• Stakeholder meetings: 18

- Phase 1:8
- Phase 2: 10

Results generated

- Power flow: 5 GB
- MAPS: 2,000 GB
- MARS: 25 GB

- Additional information requests: over 5 rounds
- Documents published
 - Report: 79 pages
 - Appendix: 354 pages
 - FAQ: 3 documents
- NYISO engineering labor hours: Over 6000 hours in 2017



Summary of Improvement Suggestions



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- The NYISO received many comments throughout the Western NY PPTPP.
- The following slides are a summary of received suggestions to initiate discussions with stakeholders on areas of potential improvements.

Pre-Solicitation Preparation

- Release the information of transmission facilities, such as conductor/terminal equipment ratings, and future transmission plans
- Should the NYISO define all scenarios before solicitation of proposed solutions?
- Should the NYISO define the weighting factors for the evaluation metrics before solicitation of proposed solutions?



Solicitation of Solutions: Solution Solicitation Window

- Extend the solution solicitation window
 - 60 days may not be enough to develop a solution with complete details
 - Should the NYISO have a second information submission window for viable and sufficient projects?

Evaluation and Selection: Independent Cost and Schedule Estimates

- Publish and review independent cost and schedule estimates first, convert the table to a Gantt chart, and present them in a more consistent format
- In how much detail should the cost estimates be published for all projects?

Evaluation and Selection: Production Cost Simulation

- Provide more detailed results such as flows over internal and external interfaces, generation change, and zonal production cost changes
 - MAPS generates immense amount of data, how much data is realistic to supply and use?
- Should the social cost of carbon be considered? How?



Evaluation and Selection: Production Cost Simulation

- Consider transmission outages and other unforeseen factors in estimating production cost savings.
- Enhance quality of natural gas and emission allowance price forecasts.
- Consider modeling variability resulting from loop flows around Lake Erie in production cost simulations.
- Model entry and exit decisions for generators in a manner that is consistent with the expected competitive market outcomes.
- Model key plants in New York based on latest available information.



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Communication with Developers

- Invite developers to present their proposed projects to the Public Policy Transmission Planning team before evaluation
 - Currently being implemented for the AC Transmission Need
- Review the results with developers before publishing the draft report to the working groups
 - Share the detailed results with developers individually before publishing the draft report

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Transparency

Should the NYISO publish the information of all projects, or just the selected project?



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Coordination with Interconnection

- What guidance should developers be given in submitting public policy projects to the interconnection process?
- What stage of the interconnection process should be required for a project to be eligible for selection?



Provide More Clarity on Non-BPTF Treatment

- How does the PPTPP consider non-BPTF violations in the Viability and Sufficiency Assessment?
- At what point of the planning process would the NYISO inform developers of a common non-BPTF violation to be addressed?
- Non-BPTF addressed in LTP vs. PPTPP
- Should non-BPTF be a distinguishing factor in Phase II evaluation and selection?
- If the project proposal exacerbates an existing non-BPTF violation or creates new non-BPTF violations, how will the NYISO consider such proposal in the PPTPP when the non-BPTF solutions are: (a) not part of the developer's proposal but identified during the interconnection process (*i.e.*, SUFs or SDUs); or b) part of the project proposal?

Property Rights

- Consider whether additional cost and schedule may be needed to acquire ROW from incumbent transmission owners.
 - Specifically, NYPA advises that there are "significant challenges" to acquisition of its property as a public authority under state law because its property cannot be acquired through condemnation.

Cost Containment

- The NYISO's tariff does not require consideration of cost caps in selecting the more efficient or cost effective transmission project. Accordingly, the NYISO used independent overnight capital cost estimates.
- Based upon feedback from stakeholders and the PSC, the NYISO will consider whether and how to amend its tariff to provide for selection based upon cost caps proposed by developers for Public Policy Transmission Needs in future cycles.



Revenue Requirement

- Should the NYISO consider revenue requirement instead of overnight capital cost in its evaluation?
 - Revenue requirement is related to rate making, but the NYISO does not have authority to set rates.
- Should the NYISO consider financing costs? What elements should be considered?



Next Steps



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Next Steps

- Please submit comments to: PublicPolicyPlanningMailbox@nyiso.com
- The NYISO will compile the comments and start developing an action plan.
 - Will return to future ESPWG in 2017 to continue the discussion with stakeholders and present an action plan.
- This action plan will inform the 2018 Comprehensive System Planning Process review.



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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