

Long Island Offshore Wind Export PPTN: VSA Baseline Assessment Update

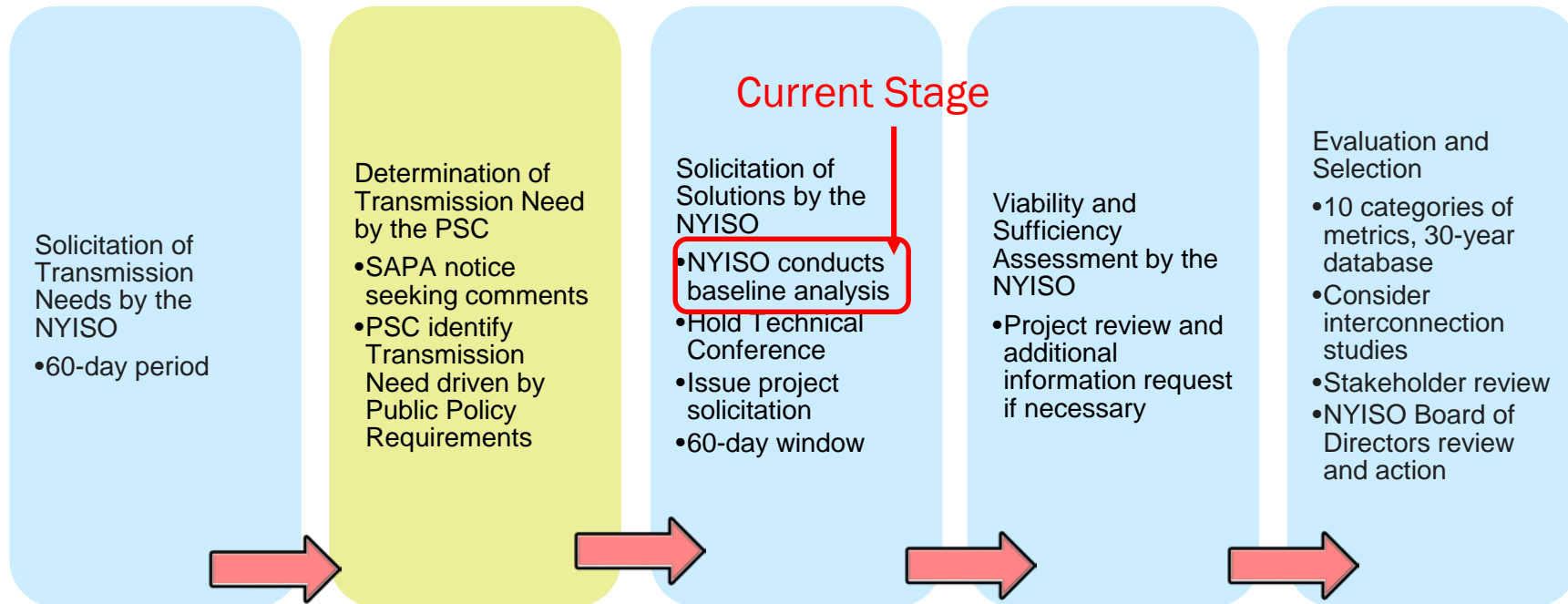
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Public Policy Transmission Planning Process



Blue means NYISO steps

Green means PSC steps

VSA Baseline Assumptions: Methodology

- **Steady-state N-0, N-1, and N-1-1 thermal and voltage analysis**
- **Security constrained dispatch will allow system adjustments consistent with transmission security criteria**
 - Renewables maintained at full output, but conventional generation will be allowed to redispatch to mitigate/reduce overloads
- **Identify system constraints impacted by LIPA offshore wind**

VSA Baseline Assumptions: Generation & Load

■ Summer Peak Base Case

- Start with 2021-series FERC 715 Peak Load Case
- Zone K load: 4,423 MW net (including 499 MW BTM solar)
- ~2,000 MW Zone K conventional generation online
- Zone J load: 11,195
- ~1,000 MW Zone J conventional generation online
- 45% capacity factor for Utility-scale & BTM solar

■ Light Load Base Case

- Start with 2021-series FERC 715 Light Load Case
- Zone K load: 1,107 MW net (including 1,108 MW BTM solar)
- ~500 MW Zone K conventional generation online
- Zone J load: 5,168
- ~500 MW Zone J conventional generation online
- 100% capacity factor for Utility-scale & BTM solar

VSA Baseline Assumptions: Offshore Wind

- **~3,000 MW in Zone K at full output:**
 - LIPA/NYSERDA Awarded: 139 MW @ East Hampton 69 kV, 880 MW @ Holbrook 138 kV, 1,260 MW @ Barrett 138 kV
 - Non-Awarded: **800** MW @ Ruland Rd. 138 kV
- **~6,000 MW in Zone J at full output:**
 - NYSEERDA Awarded: 816 MW @ Gowanus 345 kV, 1,230 MW @ Astoria 138 kV
 - Non-Awarded: 1,318 MW each @ Farragut 345 kV, Gowanus 345 kV, and West 49th St. 345 kV
- **Additional offshore wind scenarios may be used in Evaluation & Selection phase**

VSA Baseline Assumptions: Other

■ LIPA Imports

- ISO-NE: Northport-Norwalk = 0, Cross Sound Cable = 0
- PJM: Neptune = 660 MW (0 MW import in light load)

■ LIPA-NY tie lines

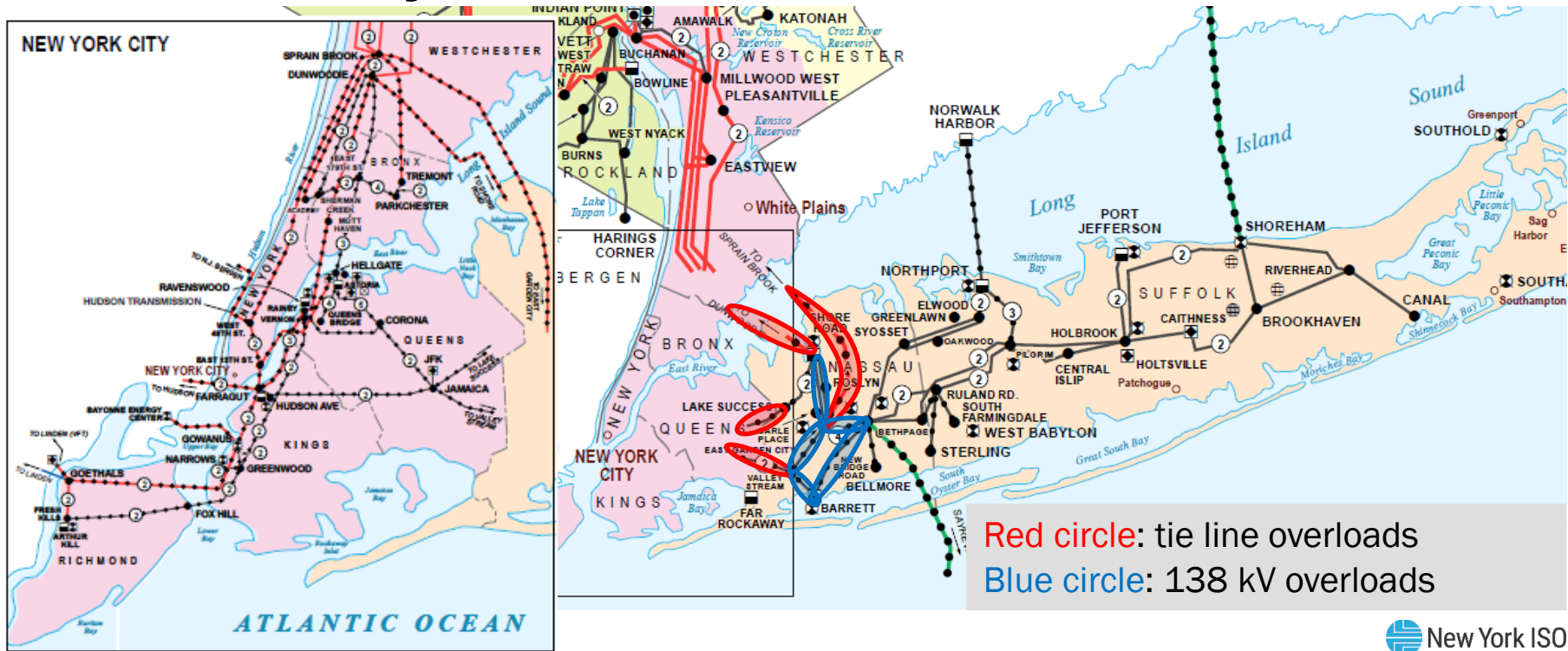
- Jamaica 138 kV ties (901/903) = 300 MW to Zone J
- Sprain Brook-East Garden City 345 kV (Y49) reverses flow to inject power into Zone I

■ NYC Imports

- 1,310 MW generic HVDC injection @ Rainey 345 kV (0 MW import in light load)

■ LI and NYC LTP updates included in FERC 715

Preliminary N-0 & N-1 Constraints



Future PPTPP Study Assumptions

- **VSA Baseline Assessment results and cases will be used to determine if transmission solutions meet the sufficiency criteria**
- **Additional reliability analysis will be performed in System Impact Study and Evaluation & Selection assessment**
- **Evaluation & Selection phase may consider additional scenarios**
 - Model relevant updates to system configuration
 - Scenarios with different assumptions, including modeling of offshore wind buildout

Estimated Schedule for Next Steps in Solicitation Phase

- **June: Present VSA Baseline Assessment results ESPWG/TPAS. VSA Base cases available for Prospective Developers**
- **June/July: Technical Conference(s) for Prospective Developers**
- **July: Issue Solution Solicitation Letter**

Our mission, in collaboration with our 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 policymakers, stakeholders and investors in the power system



Questions?