

# Long Island Offshore Wind Export PPTN: VSA Baseline Assessment Updates

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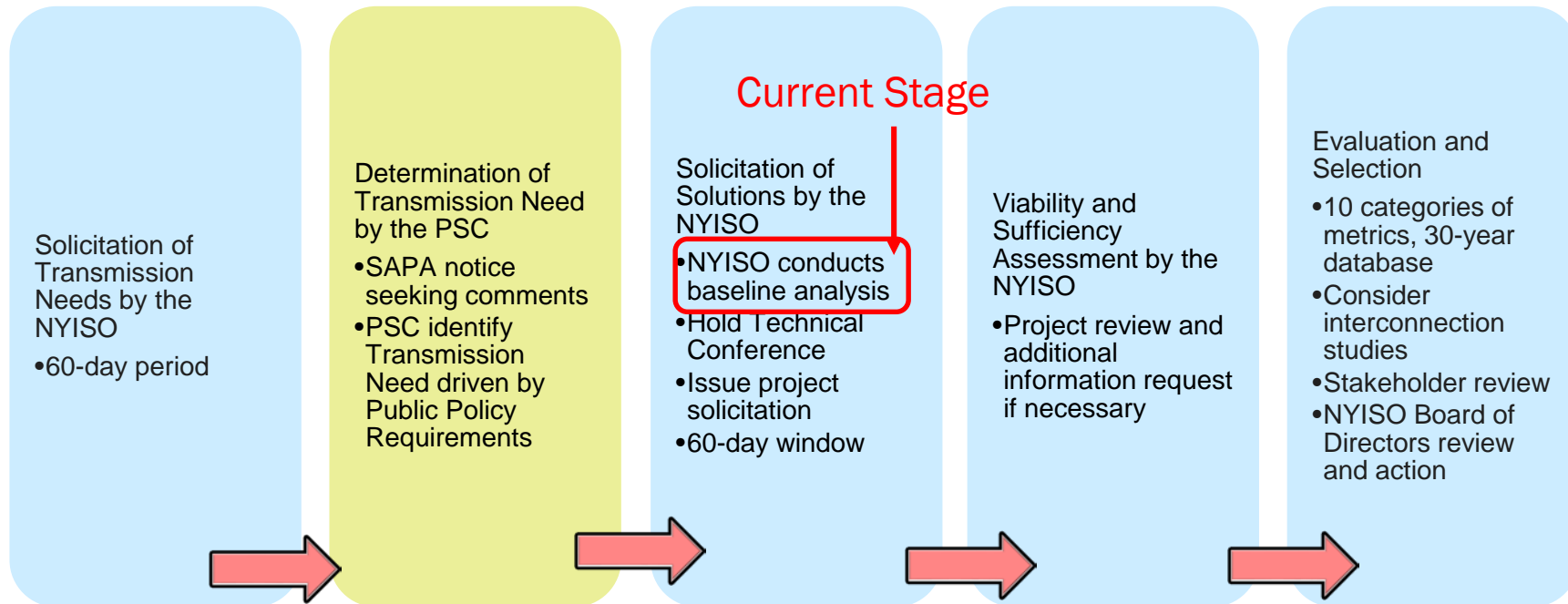
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**ESPWG/TPAS**

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# Public Policy Transmission Planning Process



Blue means NYISO steps

Green means PSC steps

# Methodology

# VSA Baseline Assumptions: Methodology

- **Objective: Identify system constraints impacted by LI offshore wind**
- **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
- **Additional reliability analysis will be performed in System Impact Study and Evaluation & Selection assessment to evaluate projects beyond the sufficiency criteria**

# VSA Baseline Generation Assumptions

- Modeled generation retirements and land based renewable buildout consistent with RNA 70 x 30 scenario
- Over 8,000 MW conventional generation in Zone J and over 3,000 MW conventional generation in Zone K available
- Certain units dispatched in Zones J & K for local reliability needs
- Economic dispatch and operating requirements will be considered in production cost simulations and additional scenarios in Evaluation and Selection Phase

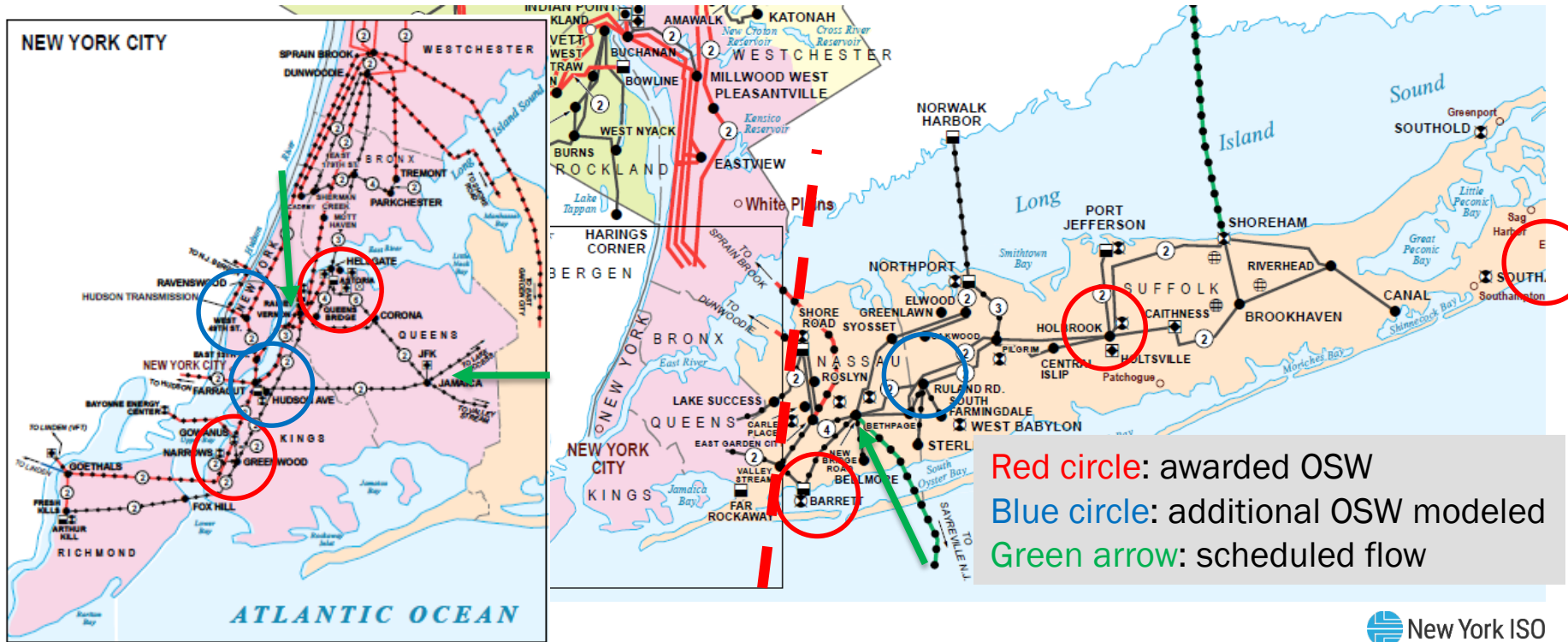
# VSA Baseline Assumptions: Generation & Load

	Zone J		Zone K	
	Summer Peak	Light Load	Summer Peak	Light Load
Load (MW net)	11,195 (including 290 MW BTM solar)	4,524 (including 644 MW BTM solar)	4,423 (including 499 MW BTM solar)	1,107 MW (including 1,108 MW BTM solar)
Conventional Generation Dispatch (Pgen MW)	~2,100	~900	~2,000	~500
Conventional Reserve (Pmax - Pgen MW of committed units)	~2,400	~2,400	~900	~400
Total Conventional Generation Available (Pmax)	>8,000	>8,000	>3,000	>3,000

# Offshore Wind: VSA Baseline Scenario

- **~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: 1,310 MW each @ Farragut East 345 kV, Farragut West 345 kV, and West 49th St. 345 kV
- **Project sufficiency will be determined from this baseline**

# Offshore Wind: VSA Baseline Scenario



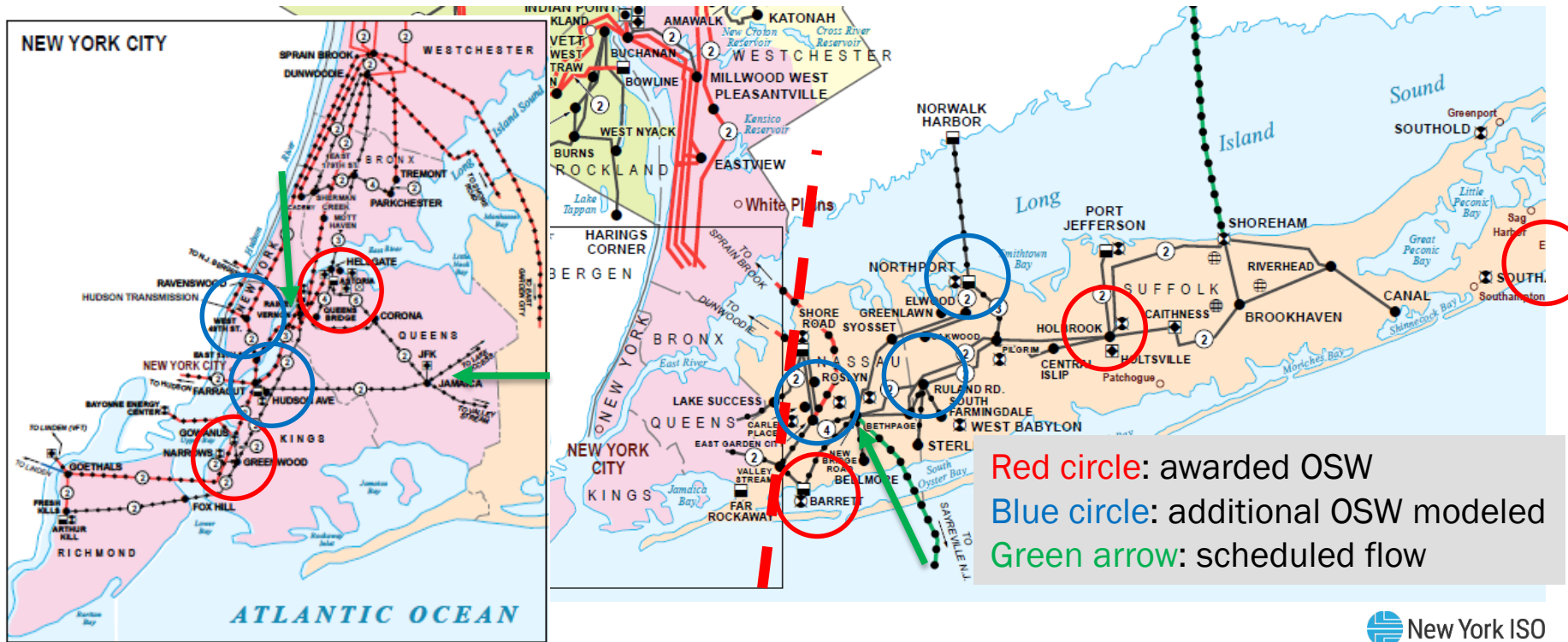
Red circle: awarded OSW  
 Blue circle: additional OSW modeled  
 Green arrow: scheduled flow



# Offshore Wind: Alternate Scenario

- **~6,000 MW in Zone K at full output:**
  - LIPA/NYSERDA Awarded: 139 MW @ East Hampton 69 kV, 1,050 MW @ Holbrook 138 kV, 1,350 MW @ Barrett 138 kV
  - Non-Awarded: 1,150 MW each @ Ruland Rd. 138 kV, East Garden City 345 kV, Northport 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: 1,310 MW each @ Farragut East 345 kV, Farragut West 345 kV, and West 49th St. 345 kV
- **This scenario, potentially along with other scenarios, will be used in the Evaluation and Selection phase to evaluate and rank projects' performance in the expandability metric**

# Offshore Wind: Alternate Scenario



# 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**

# Next Steps

# Estimated Schedule for Next Steps in Solicitation Phase

- **Early July: VSA baseline results presented to ESPWG. Cases and detailed results available for Prospective Developers**
- **Early to Mid July: Technical Conference(s) for Prospective Developers**
- **August: Issue Solution Solicitation Letter**

# Baseline Cases and Detailed Results

- Baseline cases and detailed results will be made available to prospective developers prior to the technical conference
- Must complete CEI/NDA [here](#)

Requested Information (Select all applicable): \*

- MyNYISO.com access
- NYISO FERC 715 Files
- NYISO TCC Auction Data (TAD)
- Project Specific Interconnection Materials
- NYISO Direct Communications Procedure
- Dynamics and Short Circuit Databases (Non project speci
- Other

**Other Information & Acknowledgements**

Specify what information you are looking for \*

Long Island Offshore Wind Export Public Policy Transmission Need cases and other supporting material.

I affirm that the requested information is needed and will be used solely for the following purpose: \*

The development of a LI OSW Export PPTN project.

Describe in detail

# Technical Conference Logistics

- Held virtually with prospective developers prior to solicitation
- Invitation and instruction to register will be sent via email to stakeholders in early July
- Developers may send questions/suggested topics ahead of time by July 1<sup>st</sup> to [PublicPolicyPlanningMailbox@nyiso.com](mailto:PublicPolicyPlanningMailbox@nyiso.com)
- The NYISO may hold more than one technical conference

# Technical Conference Topics

- **Baseline Assessment results and additional information**
- **PPTPP and TIP Processes**
- **Sufficiency Criteria**
- **Evaluation Methodology and Criteria, to the extent practicable**
- **Contingency percentages and escalation factors for capital cost estimates, to extent practicable**
- **Developer's perspective on potential issues**
- **Examples of new facilities vs upgrades**



# 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?