



FERC Order 1000: NYISO Regional Approach

John P Buechler

Executive Regulatory Policy Advisor

New York Independent System Operator

NESCOE Competitive Transmission Forum

Westborough, MA

October 26, 2015

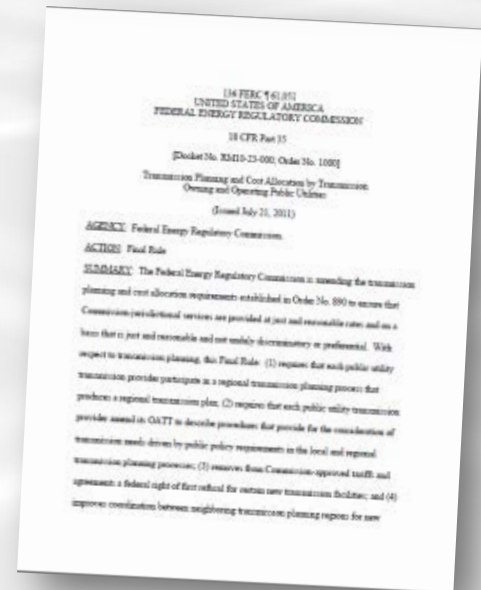
Outline

- ◆ **Order 1000 Key Elements**
- ◆ **NYISO Comprehensive System Planning Process**
- ◆ **Competitive Process**
 - *Qualification & Project Information*
 - *Evaluation & Selection*
 - *Inclusion of Non-Incumbent Developers*
 - *Enrollment of new TOs*
 - *MMU Review & Board Selection*
- ◆ **Appendix**
 - *NYS Public Policy Initiatives*

FERC Order 1000

◆ Key Elements

- *Regional Planning*
- *Interregional Planning*
- *Transmission Needs Driven by Public Policy Requirements*
- *Non-incumbent Rights – “Right of First Refusal”*
- *Cost Allocation Requirements for Regional & Interregional Transmission Projects*

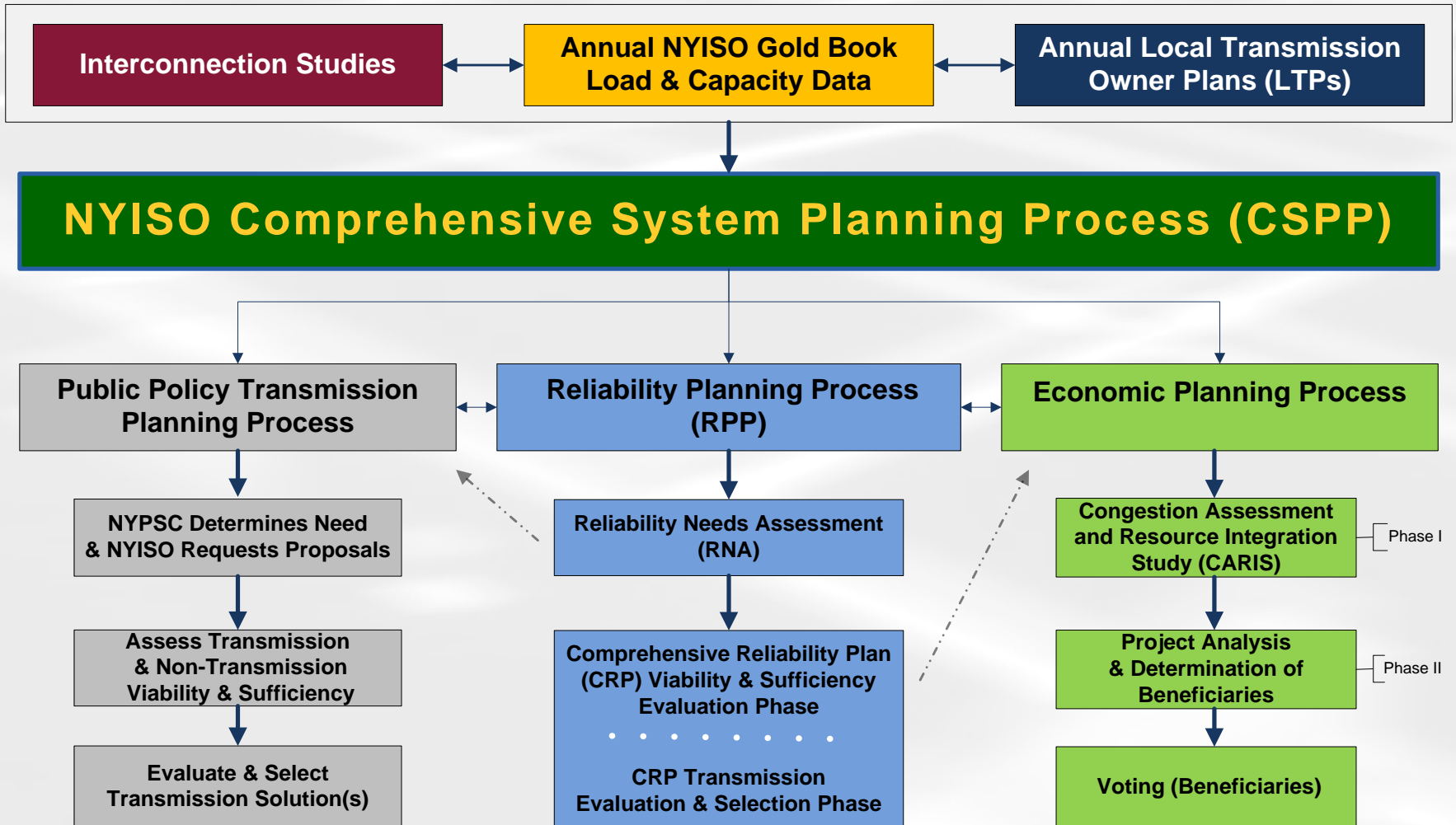


- ◆ **Regional filings made 10/16/2013, 9/15/2014, and 5/18/2015**

Impact on Regional Process

- ◆ **Creation of Public Policy Transmission Planning Process**
 - *Required to consider transmission needs driven by public policy*
 - *Process must provide for the solicitation and comparable evaluation of transmission and non-transmission solutions*
 - *Process must determine the more efficient or cost effective transmission solution*
 - *Process must provide an ex-ante cost allocation methodology*
- ◆ **NYISO selection of transmission projects**
 - *Qualified incumbent TOs & non-incumbent developers are eligible to propose solutions*
 - *Reliability Planning Process culminates in NYISO selecting the more efficient or cost-effective transmission solution*
 - *NYISO also selects the public policy transmission solution, subject to impact on wholesale electricity markets*
 - *Selection is for purposes of cost allocation & recovery under NYISO's Tariff*
 - *NYS PSC has authority over siting*
 - *No change to Economic Planning Process: current voting process culminates in selection*

NYISO Comprehensive System Planning Process



Reliability Planning

- ◆ **After needs identified (RNA) - solutions solicited**
 - *All types: Transmission, Generation, Demand-Side*
 - *All categories: Market-based, Regulated Backstop, Alternative Regulated*
- ◆ **Phase I: Evaluate all qualified solutions**
 - *Viability: Technically practicable & timely*
 - *Sufficiency: Does solution meet the identified need?*
- ◆ **Phase II: Evaluate regulated transmission solutions**
 - *System Impact: Does solution cause any reliability issues?*
 - *Efficiency: How much margin does solution provide? Expandability, operability and performance of new transmission project*
 - *Economic: Total capital cost and cost-per-MW*
 - *Local Transmission Plan sensitivity: Is regional solution more efficient or cost effective than local TO plans? For information only*
- ◆ **NYISO selects transmission solution**
 - *If non-incumbent project is selected, NYISO may direct the incumbent TOs to proceed with a backstop solution in parallel to maintain reliability*
 - Regulated solution is triggered only if the market does not provide adequate solutions to maintain reliability over the 10-year study period
 - Backstop is halted when NYISO is confident non-incumbent project will succeed; halted as early as possible

Public Policy Planning

- ◆ **Public Policy Transmission Planning Process**
 - *To be performed in parallel with Reliability Planning Process*
 - *Evaluate solutions to transmission needs driven by public policy requirements*
- ◆ **Phase I: Identify Needs and Solicit Solutions**
 - *NYPSC identifies transmission needs driven by public policy*
 - *NYISO solicits solutions (transmission, generation, or EE/DR)*
 - *NYISO evaluates solutions for viability and sufficiency to meet the need*
- ◆ **Phase II: Transmission Evaluation and Selection**
 - *NYISO evaluates proposed transmission solutions to identify the more efficient or cost effective transmission solution*
 - *Market Monitor assesses the potential market impacts of the transmission solution*
 - *NYISO Board may select a transmission solution for purposes of cost allocation*

Economic Planning

- ◆ **Congestion Assessment and Resource Integration Study (CARIS)**
 - *Perform in alternate years to the RNA*
 - *Evaluate congestion and provide economic information*
- ◆ **Phase I: Study Process**
 - *Determine top congestion locations in New York*
 - *Analyze generic solutions – all resources evaluated (transmission, generation and demand response)*
 - *Provide information to developers and marketplace*
- ◆ **Phase II: Specific Projects – No Solicitation**
 - *Transmission projects proposed by TOs and other developers*
 - *Eligibility threshold: benefit to cost ratio greater than 1.0*
 - *Cost recovery under NYISO tariff needs 80% beneficiary vote*
 - *Additional studies are available*
 - Provide input for consideration by TOs or other developers

Entity Qualification Requirements

- ◆ **Enhanced entity qualification and project information requirements**
 - *Experience/plan for project financing, development, construction & maintenance (provide examples)*
 - *Financial statements, credit rating, demonstration of financing capability*
 - *Demonstration of site control or plan for obtaining control*
 - *Schedule and status of contracts, permits, financing (submit agreements when available)*
 - *Status of equipment & procurement plan*
 - *Evidence of reasonableness of project cost estimates*
- ◆ **Pre-qualification may be requested at any time**
 - *Names of qualified developers posted on NYISO's website*

Two-Phase Approach

◆ Two-Phase planning analysis

- ***Phase I: Comparable evaluation of viability and sufficiency of solutions to meet Reliability Need or PPR Need***
 - All resources included – transmission, demand response, generation
 - To determine whether the proposed project will meet the identified need in a timely manner
 - Application fee of \$10,000 required
- ***Phase II: Evaluation & selection from transmission proposals of the “more efficient or cost effective solution”***
 - For transmission projects that are viable & sufficient
 - Selection provides cost allocation and recovery under NYISO Tariff
 - Study deposit of \$100,000 required

Evaluation & Selection Criteria

◆ Detailed review

- *Capital cost estimates*
- *Cost per MW ratio of transmission*
- *Expandability/Operability/Performance*
- *Developer property rights to complete project*
- *Potential for delay in construction*
- *Criteria from DPS/PSC*

◆ Requires much more information

- *Detailed entity qualification criteria; project development experience, financing, ability to obtain rights of way*
- *Detailed project information; engineering specifics, cost estimates; review by NYISO consultants*

◆ Qualitative ranking of projects

- *NYISO does not make cost the primary criterion, or use weighting or a mathematical formula for selection purposes*

Non-Incumbent Developers

- ◆ **If NYISO selects and triggers a non-TO transmission project, it will enter into a non-incumbent transmission development agreement**
 - *NYISO filed a pro-forma development agreement for regulated reliability transmission projects in May 2015*
 - *Development agreement is a bridge between project selection and operation*
 - *Still awaiting FERC approval*
 - *NYISO already has an agreement with TOs to develop regulated backstop solutions to reliability needs*
- ◆ **Cost Recovery for transmission projects**
 - *Developer files its transmission costs for approval by FERC*
 - *FERC decides rate recovery if the project is selected*
- ◆ **Cost Recovery for non-transmission projects**
 - *In accordance with NY State law*

Enrollment of New TOs

- ◆ Any interested entity can participate in the NYISO planning processes without enrolling
- ◆ An entity may enroll in the NYISO planning region by becoming a Party to the NYISO Agreement
 - *Enables participation in the NYISO governance process*
- ◆ An entity can become a Transmission Owner either by signing the NYISO/TO Agreement or a separate agreement under terms comparable to that agreement, and by turning over operational control of its facilities to NYISO
 - *NYISO will develop a proposed operating agreement for new transmission owners*

MMU Review & NYISO Board Selection of PPR Projects

- ◆ **Reliability Transmission projects built to “keep the lights on”**
 - *Market Monitoring Unit (MMU) review to determine whether market failures may have led to the need for regulated solutions*
- ◆ **PPR Projects which may undermine competitive market signals**
 - *MMU to report to NYISO Management Committee before stakeholder vote and to NYISO Board of Directors before action*
 - *Board retains right not to select any transmission project if harmful to NYISO competitive wholesale markets*

Public Policy Status

- ◆ **FERC approved the NYISO Public Policy Transmission Planning Process (PPTPP) in July 2014, with an effective date of January 1, 2014**
- ◆ **On August 1, 2014, NYISO issued a letter inviting stakeholders and interested parties to submit proposed transmission needs driven by Public Policy Requirements**
- ◆ **NYISO submitted the proposed needs to the PSC on October 3, 2014**
- ◆ **On July 20, 2015, the PSC issued an order addressing Public Policy Requirements for transmission planning purposes -- including identification of a Public Policy Transmission Need (PPTN) for Western NY**
- ◆ **NYISO to solicit solutions Nov. 1 -- Proposals due Dec. 31**

APPENDIX

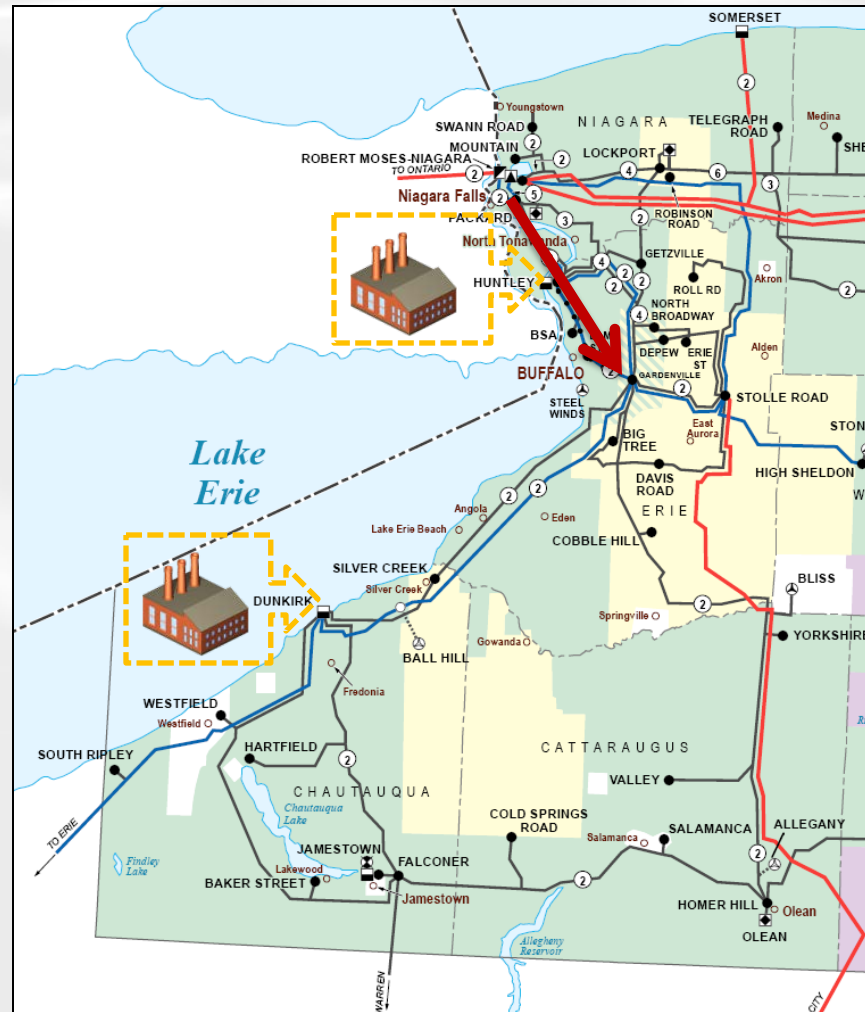
New York State Public Policy Initiatives

Western NY Public Policy Transmission Need

- ◆ **PSC Order -- NYISO should consider projects that increase Western NY transmission capability sufficient to:**
 - *Obtain the full output from Niagara (2,700 MW including Lewiston Pumped Storage)*
 - *Maintain certain levels of simultaneous imports from Ontario across the Niagara tie lines (i.e., maximize Ontario imports under normal operating conditions and at least 1,000 MW under emergency operating conditions)*
 - *Maximize transfers out of Zone A to the rest of the state*
 - *Prevent transmission security violations (thermal, voltage or stability) that would result under normal and emergency operating conditions*
 - *Maintain reliability of the transmission system with fossil-fueled generation in Western NY out-of-service -- as well as in-service*

Western New York

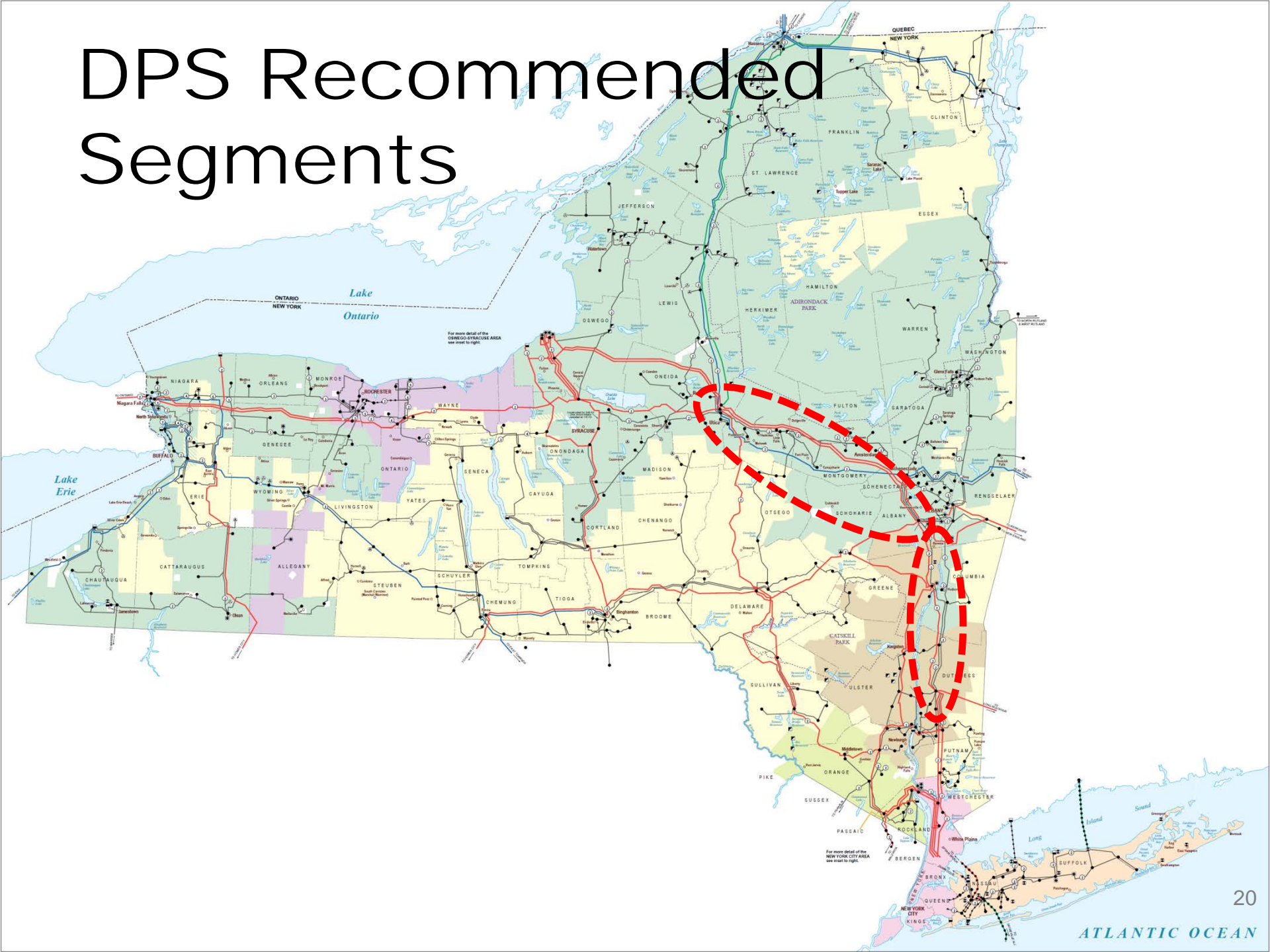
- ◆ Existing transmission constraints affect Niagara generation and Ontario Imports
- ◆ These transmission constraints are greater if Dunkirk and Huntley fossil-fuel units are shutdown



AC Transmission Upgrades

- ◆ **PSC called for proposals for AC transmission to increase upstate-to-downstate transfer capability by approximately 1,000 MW**
 - *Applications originally submitted October 2013*
 - *Revised applications submitted January 2015*
- ◆ **Four Developers proposed 22 different solutions**
 - *North American Transmission*
 - *New York TOs*
 - *NextEra*
 - *Boundless*
- ◆ **Sept. 2015 -- DPS staff recommended two transmission segments**
- ◆ **Dec. 2015 -- PSC will consider DPS staff recommendation and may identify a public policy transmission need to refer to NYISO**

DPS Recommended Segments





The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.

www.nyiso.com