### **New York State Energy Planning Board**

Pat Curran The New York Independent System Operator (NYISO) April 2, 2012



The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and performs comprehensive reliability planning for the state's bulk electricity system.

www.nyiso.com

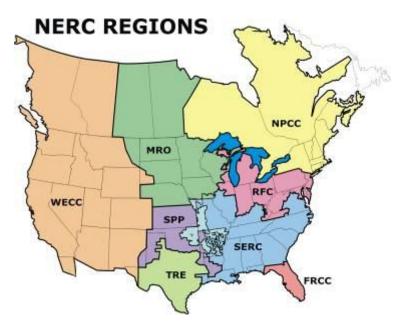


## The NYISO's Major Roles

- Reliable operation of New York's bulk electricity grid
- Fair and open administration of New York's wholesale electricity markets
- Comprehensive reliability and resource planning for New York's bulk power system
- Unbiased, independent source of information on the grid and the markets



### **Reliability Regulation**



#### North American Electric Reliability Corporation (NERC)

- Independent, self-regulatory, not-for-profit organization with mission to improve the reliability and security of the bulk power system in the U.S., Canada and part of Mexico
- Established in response to the 1965 blackout
- Compliance with NERC Reliability Standards became mandatory and enforceable in the U.S. in 2007
- NERC was named as the ERO by FERC

#### Northeast Power Coordinating Council (NPCC)

- Includes New York, New England, Ontario, Québec, and the Maritimes
- Formed as voluntary, not-for-profit, regional reliability organization in 1966
- Restructured in 2007 as the ERO Regional Entity for the Northeast

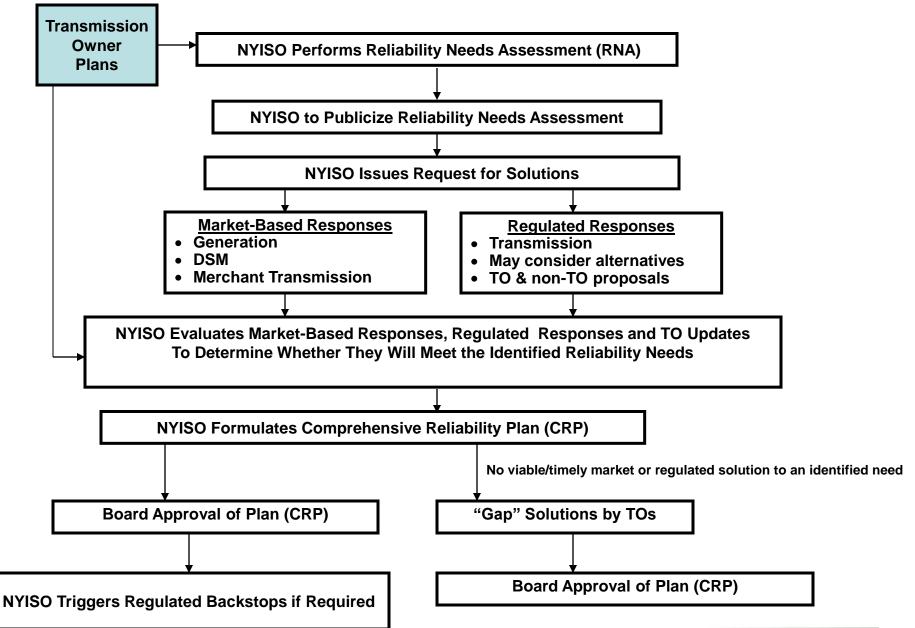
#### New York State Reliability Council (NYSRC)

- Not-for-profit organization established in 1999
- Responsible for Reliability Rules specific to the New York State Power System
- U.S. law authorizes New York State to impose more stringent reliability standards



# NYISO Comprehensive System Planning Process (CSPP)

#### NYISO Proposed Comprehensive System Planning Process (CSPP) - Reliability Planning Process-





### **Transmission Owner Planning Responsibilities**

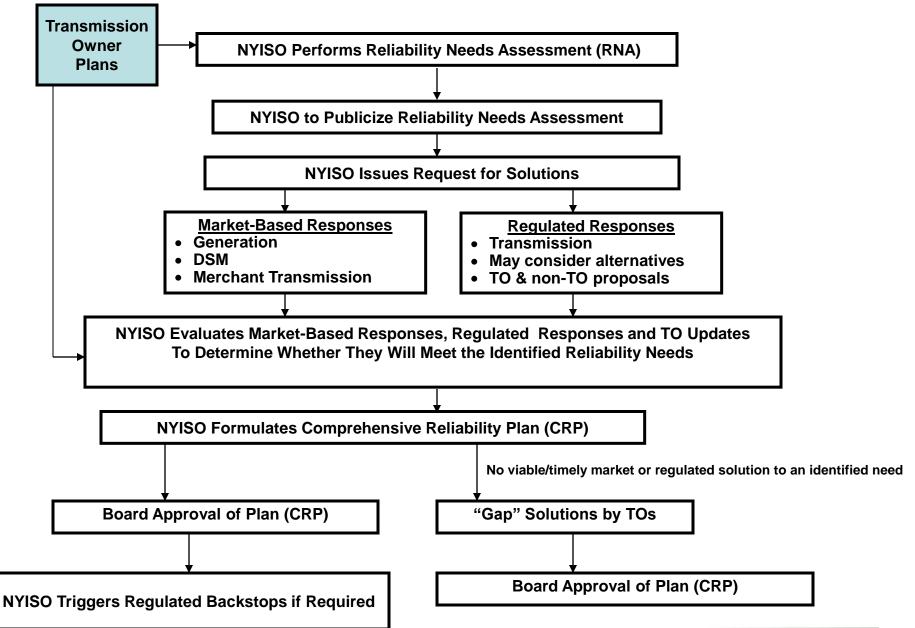
- Responsible for planning for the reliability of their local systems
- TO plans are submitted to the NYISO for review
- TO plans are used as input to the NYISO's CRPP & Interconnection System Impact Studies
  - An enhanced Local Transmission Planning Process was included in NYISO's Order 890 Compliance Filing
- TOs assist NYISO with respect to modeling of their local systems
- TOs assist NYISO in performance of Facilities Studies for interconnections
- TOs also have responsibility for reliability under NYS Public Service Law



### Reliability Needs Assessment (RNA)

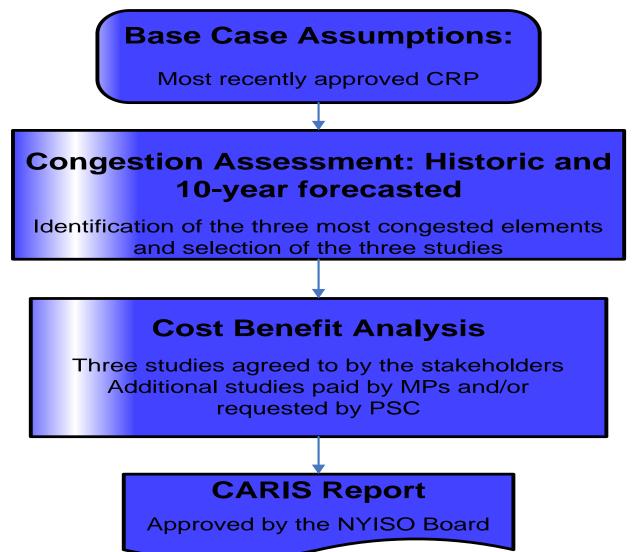
- NYISO Staff performs a Reliability Needs Assessment over the 10-year planning horizon based upon existing reliability criteria
  - NERC, NPCC and NYSRC (New York State Reliability Council)
  - Includes transmission security and resource adequacy requirements
- Scenario analysis is employed to test the robustness of the base case assumptions
  - E.g. load growth, energy efficiency, retirements, environmental regulations
- RNA identifies violations of reliability criteria, but does not identify specific facilities to meet the identified needs
- Provision for MP input & review of RNA
  - Through ESPWG & TPAS
  - Vote at OC and MC
- Provision for coordination with adjacent regions
- NYISO Board has final approval of RNA
- The final approved Reliability Needs Assessment is widely distributed
  - Posted on NYISO website

#### NYISO Proposed Comprehensive System Planning Process (CSPP) - Reliability Planning Process-





### **CARIS Phase I: Study Phase**





### **CARIS Phase II: Project Phase**

