

# Comprehensive Reliability Planning Process (CRPP) Implementation

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**Draft For Discussion Purposes Only** 

### **NYISO CRPP: LOLE and Compensatory MW**

## Review of RNA 2005

- Started With Zone Having the Highest LOLE
- Ran Sensitivities on Location of Zone With Highest LOLE
- Reported multiple combination of compensatory MW in the RNA Document for the Base Case and Alternates based on Voltage and Thermal Limits
  - For Voltage, Base Case showed Compensatory MW in Zone J only from 2008 2009, and in Zones I,J,K for 2010
  - For Voltage, Alternate sensitivity showed Compensatory for Zone J only
  - For Thermal, Base Case showed Compensatory MW for Zones I,J, and K, Alternates showed for Zone J only and Zones G-K
  - For Information on Potential Solutions, Not Cost Allocation

### NYISO CRPP: LOLE and Compensatory MW

### RNA 2006

- Run NYCA Free Flow and With Limit Constraints
  - Identify LOLE Violation by Constraints and Capacity Deficiencies
- Look at Relative LOLE and Constraint Summaries
  - •Hours at Limit and What is Constraining
  - Identify LOLE cause by constraint or capacity deficiency
  - Identify LOLE cause by constraint or capacity deficiency
  - Capacity Deficiency is shared by all downstream of the constraint
  - •No NYCA interface constraints, capacity deficiency is NYCA wide
  - Will Perform Sensitivities on Location, Iterative Process

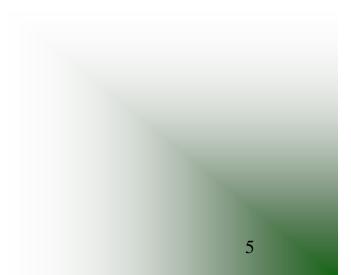
#### **NYISO CRPP: Second Five Years**

### RNA 2006

- Updated for Load Forecast and TO Plans
- Nuclear Retirements assumed to be Life Extended
- Perform AC Contingency Analysis
  - Identify Potential Local Problems
  - Identify generic Non Bulk Mitigation, Not in Solutions Phase (Table of Local Violations as seen from Bulk Power Transformers, similar to Extreme Contingency Reporting)
  - Assume Constant Thermal and Voltage Transfer Limits from 2011 to 2016
  - MARS analysis to Identify Compensatory MWs

#### **NYISO CRPP: Discussion Points**

- ABC JK Transmission Capability
  - Modeled as emergency assistance for the ten year period
- Translation to MARS limits
  - Independent limits developed for UPNY/SENY, UPNY/Con Ed and Sprainbrook-Dunwoodie South based on all facilities in.
  - Simultaneous limits developed for Hudson Valley interfaces



#### **NYISO CRPP: Scenario Analysis**

- Environmental and NUG Retirement Scenarios
  - Develop Level of MWs To Analyze by Zone
  - Perform AC Contingency Analysis to Identify Increase in Non Bulk Problems
  - Perform MARS analysis to determine LOLE violations
- Poletti Only Poletti change to Measure Impact
- High Load
- NYPA announced project for 500MW firm capacity from N.J.
  - to West 49th Street