

Comprehensive Reliability Planning Process (CRPP) Implementation and Scenarios

By

William A. Lamanna

ESPWG

August 22, 2005

Draft For Discussion Purposes Only

NYISO CRPP: Background Findings

- From 1994 through 2004 load growth for the NYCA averaged approx. 1.2%.
- However, load growth in SENY (G-K) has averaged approx. 2.8% while UPNY (A-F) has experienced neg. load growth.
- Load growth in SENY through 2004 totals close to 5,000 MW while the net capacity additions for SENY total approx. 1250 MWs.
- The CRP base case has statewide load growth which averages about 1.2% with modest growth in UPNY and slightly less than 2% in SENY
- The CRP base case installed resources increase through 2007 but decline thereafter
- Resources are at 2004 levels by 2008.

NYISO CRPP: Base Case Setup and Preliminary Results, Steps To Identify Reliability Need

- Preliminary Results Indicate Reliability Needs
- MW and MVAR Shortages in Lower Hudson Valley and Downstream
- Capacity Surplus Above Lower Hudson Valley
- Identification of Reliability Needs
 - Not Cost Allocation
 - Transmission vs. Capacity or Combination
 - Capacity Location (ROS vs. Localities)
- Voltage Based Transfer Limits are Critical Item
- Neighboring Systems are Critical Item
 - Forecast of Declining Reserve Margins
 - Retirement Impacts are not Fully Assessed

NYISO CRPP: Base Case Setup and Preliminary Results, Steps To Identify Reliability Need

- Steps Taken to Quantify Reliability Needs
 - Goal is Not to Identify Specific Locations/Plans
 - Scaling of MVAR Load
 - Insertion of Reactive Compensation, Active and Reactive
 - Capacity Additions
 - Resource Adequacy Tested By Varying Transfer Limits

NYISO CRPP: List of Proposed Scenario Analyses Reserve Margin Screens Completed

➤ Load Forecast Uncertainty – Base, Low, High as Required	S,A
➤ Fuel Mix/Diversity/Gas Infrastructure -	S
➤ Nuclear Retirement Scenarios	
- Indian Point 2 & 3	S,A
- Plant License Non Renewal	S
➤ Coal Retirement Scenarios	
- Older Plants	S,A
- Add Newer NY Plants and Neighbor System Retirements	S
➤ TO Projects	S,A
➤ Additional Resources	
- Large Remote Units	S,A
- RPS Impacts and Demand Side Programs	S,A
➤ Neighboring System Delivery Schedules	
- PAR Schedules (ABC Lines)	S,A
- Tie Assistance and External ICAP	S,A

Legend: Screening (S), Analysis (A)