

Comprehensive Reliability Planning Process (CRPP) Implementation

By

William A. Lamanna

ESPWG

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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