NYSRC ICS meeting notes for May 4, 2016

Summary – On Schedule
Completed Activities:

- ICS approved using .14 LOLE for PJM
- SCR Model: Proposed Alternative Method for Determining SCR Values - Completed
- Special Sensitivity Case (Policy 5 change) - Completed
- NYISO Review of ELR/CLR data – Completed
- Environmental Initiatives Update – Completed
- Assumptions Matrix – On Schedule

While there are a few issues that still need our attention, I have every confidence that all remaining items (with the exception of emergency assistance) will completed by our next meeting:

- Policy 5 changes related to retirements and mothballs
- PJM Wheel Balance Topology Change
- PJM 4 vs. 5 bubble modeling – an ICS meeting will be set for either May 19 or 20 to finalize the model assumption
- SCR modeling has been authorized by ICS subject to EC approval

Special Question asked by the EC

Background:

The NYISO presented to the LCR Task Force a new process for determining the LCRs to optimize market efficiency. The NYISO will be adhering to the IRM established by the NYSRC and an outcome in which the LOLE = 0.1 requirement is met. However, the combination of the NYSRC IRM and the NYISO LCRs would significantly depart from the Tan 45 point required by Policy 5.

Question:

If the NYISO goes forward with this plan, would the NYSRC find the NYISO in non-compliance?

Carl Patka stated in a written comment on April 29, the following:

Dear Bob and ICS Members,

I would like to clarify the background statement described in Bob's email so that it fully describes the current situation, and so that the Question which he posed, to the extent the NYSRC was contemplating responding, could also be considered in its context.

The NYISO presented to the LCR Task Force a process by which it would be examining potential new methodologies for determining the LCRs. Revisions to the current methodology were being considered in order to optimize market efficiency. The NYISO confirmed that it will be adhering to the IRM established by the NYSRC and an outcome in which the LOLE = 0.1 requirement is met. Possible alternate methodologies being considered include those that might depart from the Tan 45 point.

In relation to considering the question Bob posed at the EC, and as indicated in his email, the NYISO is well aware of the obligations to comply with NYSRC rules as well as the NYISO's own Tariffs. The NYISO is in its evaluation stages of potential changes to its methodology and will be discussing that information with its stakeholders. As described to the EC, the NYISO will keep the ICS and the EC informed as it progresses to the state of its proposal. Should the NYISO's evaluation result in potential changes to the IRM methodology contained in Policy 5, the NYISO would discuss that with the ICS and the EC in advance. As always, the NYISO welcomes input on its consideration of issues of interest to the NYISO and in fulfilling its role to provide IRM study assistance to the NYSRC.

Thank you,

Carl

The NYISO said that their consultant (GE) has been instructed to analyze the LCR process with an objective function to lower costs in zones G, H, I, J, and K. NYISO instructions to GE was not to violate the LOLE statewide of 0.1 and to maintain the IRM at the level established by the EC. NYISO contends that there will be no violation of Policy 5 as the IRM process includes the Tan 45 process and that their process will use the IRM. NYISO did state that if they found a more equitable LCR method that did not use the current methodology (Tan 45 process) they (NYISO) would request that the NYSRC review the new methodology.

This is a last minute entry from the NYISO to help explain their relationship with GE.

…the NYISO is asking GE to develop a tool or tools that allow the NYISO to determine the LCR combinations that minimize total NYCA capacity cost in a manner consistent with the NYSRC's IRM and the policy 5 methodology, thereby maintaining minimum reliability criteria in NYCA and each of the

localities. This tool may also allow us to look into alternative methodologies for assessing locational requirements that could be implemented for example when and if a new zone is created.

Al Adamson pointed to a rule in the Reliability Rules & Compliance Manual for Planning and Operating the New York State Power System, Version 36 March 1, 2016, section A.2: Establishing Load Serving Entity Installed Capacity Requirements and Deliverable External Area Installed Capacity.

> C. Compliance
>
> 1. Measures M1. The NYISO conducted an annual analysis to establish LSE and locational installed capacity (ICAP) requirements for the next Capability Year. The analysis was based on NYCA ICAP requirements established by the NYSRC and utilizes models and assumptions consistent with those used by the NYSRC for its ICAP requirement study. A report was prepared in accordance with R3, which addresses the results of the study, models utilized, study procedures and assumptions, and other study considerations. The report demonstrates that the LSE and locational ICAP requirements established by the NYISO and the allowable amount of LSE ICAP that may be located externally to the NYCA meets NYSRC Reliability Rules, in accordance with R1 and R2, respectively.

Al's point was that any variation by the NYISO to establish a locational requirement not in conformance with the above highlighted language (underlining added) is a violation of NYSRC rules.

NYISO took exception to the highlighted as they will not be changing the IRM process and that the LCR calculation is their responsibility.

NYISO pointed out that nothing has been firmly set nor would they violate any NYSRC rules. At present studies are being developed.

ICS members could not evaluate whether there would be a violation or not, citing insufficient information. NYISO could leave the LCR as is and do cost allocations to minimize costs across the areas, but even that has not been firmly established.

Status of Studies, Scopes, and White Papers

- **Emergency Assistance (EA) Model**

  The scope was developed by Al Adamson, John Adams, and NYISO staff. After review and requests for additional studies, ICS approved the scope with changes.

  Additional studies requests:
  - Run study with PJM's expansions expected even if the expansions are not expected for another 2 years
  - Studies need to have Tan 45 analyses run
  - Removal of HTP and VFT from one of the studies
    - Requestor felt that transfer of RTEP costs may cause these lines to give up their UDR rights.

  NYISO is still exploring how they will determine useful levels for interface limits. This of course is one method to limit EA.

  NYISO expects to deliver results around September 2016 with a white paper delivered in 2017. Whether the findings will be incorporated into the 2018-19 base case remains to be seen.

  <u>The following was copied from the Scope</u>
  The purpose of this study is to analyze the maximum amount of EA that NYCA can reliably depend upon from our neighbors for application in IRM studies, considering the above-referenced EA modeling issues and other NYISO operating constraints and considerations not presently considered in the GEMARS model. Based upon this analysis, ICS will develop modeling changes as appropriate for future IRM studies. The analysis will be completed by September 2016, which will permit a sensitivity case for the 2017-18 IRM Study report. The EA model change, following

modifications as appropriate, will be incorporated in the 2018-19 IRM Study. A white paper will be prepared.

Scope

a. From the preliminary 2017 IRM Study base case, identify the maximum EA level for a simultaneous NYCA grouped import interface ("NYCA Grouped Import Interface") as well as for individual import interconnection interfaces. Plot the distributions of EA levels for all identified interconnection interfaces.
b. Observe the inflection points and confer with NYISO Operations to determine reasonable levels of EA to use as interconnection interface caps (e.g., 90% of the probabilistic draws to avoid the excessive EA draws in the last 10%). These interface caps can be converted to MW values.
c. Run cases whereby the maximum EA level of the NYCA Grouped Import Interface is capped at certain MW levels and determine the impact to the NYCA IRM using a Tan 45 analysis. Depending on the above results, run analyses, as warranted, for evaluating the need for additional individual interconnection interface caps. These cases are intended to determine the impact to IRM outcomes of simulating certain limitations in the maximum values of EA reserve benefits.

- **PJM LOLE - Completed**

ICS approved using .14 LOLE for PJM representation in the model. John Adams' presentation cited a presentation made by PJM that the IRM is based on an 0.1 LOLE plus a 0.04 LOLE adder for LOLE risk due to transmission. The cited presentation was made at the IEEE July 2015 meeting in Denver.

- **SCR Model: Proposed Alternative Method for Determining SCR Values - Completed**

  The proposal actually stirred a lot of discussion. The original, which was not approved by ICS contemplated using a rolling 5-year average performance rating which includes both test data and all event hours (not limited to 4 hours) called by the NYISO. NYISO analysis showed that by using this method there would be no need to derate SCRs with an Effective Capacity Value factor of 95%. This came under fire because of the potential to have many years with no events but the years of test data used in the calculation. Test data has shown to have better performance ratings than actual event data. Thus the NYISO proposal might skew the performance rating to higher than probably attainable when event occur.

  ICS members came up with 2 new approaches and NYISO proposed another approach.

  a. NYISO proposes that performance calculations include 5 years of event data for all called hours and add all test data accumulated during years even when there were no events. When event data is collected the oldest event data will be replaced with the new data.
  b. Mark Younger agreed using 5 years of event data for all called hours to calculate performance results, but that no test data be used in determining results
  c. I suggested that event data for all called hours and test data reported at during year when events were called. In years when there are no events, maintain the set of performance results from the last calculation. In years when there are events, drop the oldest year of event and test data and add in the new event and test data. Under this method, 5 years of

data and the associated test data are used, which is more closely aligned with generator performance calculations.

Option A was selected by the majority of voting members and Al Adamson. These members cited consistency with the current methodology.
Option B was selected by Mark Younger and John Adams. John Adams stated that test data was not representative and should not be used.
Option C was selected by Bob Boyle. I selected this approach as better representation of current practices, but did not over rely on test results.

- **Multiple Year Wind Shape – Will be completed by 6/1**

NYISO review of the MARS upgrade was discussed and ICS members authorized its use in the base case. ICS members will be providing comments to the NYISO by May 13th to the NYISO. The white paper will be finalized and approved at the June 1 ICS meeting.

- **Special Sensitivity Case (Policy 5 change) - Completed**

ICS members approved changes in Policy 5 proposed by Al Adamson. Changes will be brought to the EC with other Policy 5 changes still being reviewed.

- **NYISO Review of ELR/CLR data - Completed**

NYISO recommendation made 2 months ago to leave the ELR/CLR assumptions in place, was confirmed by John Adams. ICS closed this action item

- **Environmental Initiatives Update - Completed**

  Peter Carney indicated that he saw no environmental issues affecting our reliability for 2017-18 capability year.

ICS is on schedule to meet delivery goals.