May 3, 2017 NYSRC ICS Meeting Report
Prepared for the May 12, 2017 NYSRC EC meeting

2017 ICS Task List Update

1. **Modeling of NYISO Locality Sales**

   The NYISO presented a revised white paper with additional data on ISO-NE auction results that was requested during the April 18th conference call. At the May 3rd meeting, ICS members provided additional clarifying comments that the NYISO will incorporate into the white paper. The NYISO anticipates these revisions to be distributed on May 5th with the ICS members providing any additional feedback to the NYISO by May 12th for a final white paper approval at the May 30th ICS meeting. The NYISO's recommendation is to **not model locality capacity exports in the 2018-19 IRM base case**. The ICS members approved that recommendation. One factor considered was there is no history with a locality capacity export. To date the ICS has chosen to not model capacity exports. However, these exports have been from ROS with the majority of the MWs that received an award in the ISO-NE FCM eventually buying out of their positions. Within the last year ISO-NE has made a series of rule changes to their capacity auction process and market. This combined with a resource from a locality(GHIJ) receiving an award in the ISO-NE FCM makes it difficult to assess the amount of the awarded capacity that will actually be exported to ISO-NE. Another reason is that the implementation would be complex. Policy 5 has no guidance on how to handle sales from a locality as the generators still exist in the zone from which they are sold and are still considered as part of the NYISO's commitment and dispatch even though they have a capacity obligation to another control area. The NYISO along with GE consulting are continuing work on how to model this in MARS. The white paper will be presented to the EC at the June 9th EC meeting for approval.

2. **Emergency Assistance Limit Analysis**

   NYSRC Consultant John Adams provided the final emergency assistance white paper to the ICS. The amount of emergency assistance from ISO-NE, PJM, HQ and Ontario was analyzed. The data consisted primarily of 10 minute synchronized and non-synchronized excess reserves. This included all reserves available in ISO-NE, IESO, HQ's non-ICAP HVDC tie capability and the entire PJM RTO. The excess reserves were the total level of 10-minute reserves that are available minus the required level of 10-minute reserve. Mr. Adams concludes that based on additional analysis performed, the expected level of emergency assistance utilized in the IRM determination appears to be reasonable. However, specific draws which are 4,000 MW or higher could be excessive. The NYISO in the past has noted difficulty of assessing the maximum simultaneous import capability of

the NYCA across all interfaces during various system conditions. In the white paper, Mr. Adams recommended imposing an **emergency assistance (EA) limit of 3500 MW** in the 2018-19 IRM base case. This represents the modal value of the LFU bins 1-5 where there have been loss of load events observed in the MARS simulations. All ICS members approved the white paper along with this EA limit recommendation, with the exception of the ICS generator representative. He felt a separate limit should be applied to each external control area.

3. **Review NYISO Alternative LCR Methodology**

   The NYISO is continuing their work with GE and is anticipating a presentation to the ICAP WG in May with that same presentation to the ICS at the May 30th meeting. The NYISO will also provide an update at the May 30th meeting on the list of questions that ICS provided to the NYISO in December 2016. The ICS also asked for more details from GE on their shifting method.

4. **Sensitivity to assess the impact on the IRM of a high penetration of renewable resources**

   The NYISO provided a presentation on the proposed location of onshore wind and solar resources for the sensitivity. The NYISO used the NYSDPS Final Supplemental Environmental Impact Statement "Blend Base Case" as a basis for the quantity and location of projections. The reports is part of NYSDPS Case 15-E-0302 and can be found at the following link (http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B424F3723-155F-4A75-BF3E-E575E6B0AFDC%7D - see page 5-18). The NYISO scaled the quantities on a zonal basis to achieve the 2,000 MW of additional resources for the sensitivity. The NYISO is not proposing any off shore wind resources due to the lack of experience with off shore wind.

Proposed distribution of resources

Utility scale solar

Zone	NYS DPS EIS Nameplate (MW)	IRM Sensitivity %	IRM Sensitivity Nameplate (MW)
A	841	22%	437.1
C	391	10%	203.2
F	1812	47%	941.8
G	431	11%	224.0
K	373	10%	193.9
NYCA Total			2,000.0

On-shore wind

Zone	NYS DPS EIS Nameplate (MW)	IRM Sensitivity %	IRM Sensitivity Nameplate (MW)
A	981	26%	515.0
C	947	25%	497.1
D	851	22%	446.7
E	1031	27%	541.2
NYCA Total			2,000.0

The NYISO and ICS will continue work on the sensitivity study including developing solar shapes.

5. **Review of A/B/C , J/K and 5018 lines for topology**

   The NYISO indicated they have been working with Con Edison and is scheduled to provide the topology at the May 30th ICS meeting for discussion.

2018-2019 IRM Study Assumptions Matrix

The NYISO noted updates from the previous month with data that was made available from the release of the Gold Book. The NYISO noted that a new parameter will be developed this year for Behind-The-Meter Net Generation resources. They will return to the May 30th ICS meeting to discuss proposed methodology. Currently, there are a few of these resources in the qualification/registration process. NYISO expects to have at least one of these resources enter the market. The total amount from all of these potential resources is anticipated to be 95 MWs or less.