



Please note: This summary is provided for informational purposes only. It is not intended to be a substitute for the presentations and other information provided by the NYISO or the discussions that take place at the meetings

NYISO Consumer Interest Liaison Weekly Summary

August 1 – August 5, 2016

Notices:

- The following **document has been posted** to the NYISO website under ESPWG meeting material: [Generator Deactivation Process Revisions - Stakeholder Schedule](#)
- Market Participant **comments on the draft DCR Report** have been posted with the June 27 ICAP meeting material. The link is below.
[MP Comments](#)
- The notice of extension of the **Public Policy Transmission Planning Process for the 2014-2015 transmission planning cycle** is located [here](#). Questions about this notice or the Public Policy Transmission Planning Process can be addressed to the Public Policy Planning Mailbox (PublicPolicyPlanningMailbox@nyiso.com).
- A request for **proposed transmission needs driven by public policy requirements** has been posted [here](#). This initiates the NYISO Public Policy Transmission Planning Process for the 2016-2017 transmission planning cycle. As described in the request, please provide responses electronically to PublicPolicyPlanningMailbox@nyiso.com on or before September 30, 2016.

Meeting Summaries:

Monday, August 1, 2016

Transmission Planning Advisory Subcommittee

Study Scopes Under Consideration for Recommendation for OC Approval

Q#537 NextEra Segment A SIS Scope

Public Policy Proposal – AC Transmission

Recommended to OC for approval

Q#538 NextEra Segment B SIS Scope



Please note: This summary is provided for informational purposes only. It is not intended to be a substitute for the presentations and other information provided by the NYISO or the discussions that take place at the meetings

Public Policy Proposal – AC Transmission
Recommended to OC for approval

Q#539 NextEra Segment B SIS Scope
Public Policy Proposal – AC Transmission -- Alternative to Q#538
Recommended to OC for approval

Q#530 NextEra Empire State Line SIS Scope
Public Policy Proposal – Western NY Transmission
Recommended to OC for approval

Q#545A NextEra Empire State Line SIS Scope
Public Policy Proposal – Western NY Transmission -- Alternative to Q#530
Recommended to OC for approval

Q#547 North American Transmission SIS Scope
Public Policy Proposal – Western NY Transmission
Recommended to OC for approval

Q#548 North American Transmission SIS Scope
Public Policy Proposal – Western NY Transmission -- Alternative to Q#547
Recommended to OC for approval

Q#549 North American Transmission SIS Scope
Public Policy Proposal – Western NY Transmission -- Alternative to Q#547
Recommended to OC for approval

Q#550 North American Transmission SIS Scope
Public Policy Proposal – Western NY Transmission -- Alternative to Q#548
Recommended to OC for approval

Studies Under Consideration for Recommendation for OC Approval

Q#445 Lighthouse Wind
Niagara/Orleans Counties 201.3MW
Recommended to OC for approval

Q#466 Bone Run Wind
Cattaraugus County 132MW
Recommended to OC for approval



Please note: This summary is provided for informational purposes only. It is not intended to be a substitute for the presentations and other information provided by the NYISO or the discussions that take place at the meetings

Order Nos. 827 and 828 Compliance Filing

Thinh Nguyen of the NYISO presented information on the compliance filing for FERC Orders 827 and 828. On June 16, 2016, FERC issued Order Number 827, a Final Rule eliminating an existing reactive power exemption for wind generators. All newly interconnecting non-synchronous generators will be required to provide reactive power at the high-side of the generator substation as a condition of interconnection. The Final Rule becomes effective on September 21, 2016. Mr. Nguyen explained the transition rule noting that the Final Rule does not apply to wind generators that have executed a Facilities Study Agreement by September 21, 2016.

On July 21, 2016, FERC issued Order Number 828, a Final Rule requiring Small Generating Facilities to have ride through capability for abnormal frequency and voltage events. As a result of this Final Rule, Small Generating Facilities (generators subject to NYISO interconnection procedures ≤ 20 MW), cannot disconnect automatically or instantaneously from the system or any affected systems for:

- an under-frequency or over-frequency condition,
- an under-voltage or over-voltage condition.

The Final Rule becomes effective 65 days after it is published in the Federal Register.

Order Number 828 directs the compliance filings for Order Nos. 827 and 828 be filed in one combined filing to facilitate administrative efficiency. Mr. Nguyen led a review of the proposed tariff language in the Open Access Transmission Tariff to effectuate the changes. To see Mr. Nguyen's complete presentation, please go to:

https://www.nyiso.com/secure/webdocs/markets_operations/committees/oc_tpas/meeting_materials/2016-08-01/06_8%201%2016%20TPAS_Order%20Nos%20%20827%20and%20828%20Compliance%20Filing_FINAL.pdf

Tuesday, August 2, 2016

Installed Capacity Working Group

Proposed ICAP Manual Changes for BTM:NG

Josh Boles of the NYISO presented proposed updates to the Installed Capacity (ICAP) Manual to accommodate the implementation of Behind-the-Meter Net Generation (BTM:NG), currently scheduled for October 2016. The following Capacity Resource Interconnection Standard (CRIS) Requests were received under the Transition Rule:

- ROS 75MW
- G-J 90MW
- NYC 20MW
- LI 0MW

Mr. Boles listed updates made since the last presentation to the ICAPWG. Some stakeholders raised issues of clarity concerning metering issues and the NYISO committed to work with the stakeholders to provide a clear set of meter requirements. The NYISO will return to a future ICAPWG with any revisions that result from stakeholder feedback and will notify the market of



Please note: This summary is provided for informational purposes only. It is not intended to be a substitute for the presentations and other information provided by the NYISO or the discussions that take place at the meetings

the total MWs approved for CRIS at that meeting. The NYISO is anticipating governance action on the ICAP Manual revisions at the September 2016 BIC meeting. To see the complete presentation by Mr. Boles, please go to:

http://www.nyiso.com/public/markets_operations/committees/meeting_materials/index.jsp?com=bic_icapwg

Consumer Impact Analysis: 2015/2016 ICAP Demand Curve Reset

Tariq Niazi of the NYISO presented the Consumer Impact Analysis performed on aspects of the 2015/2016 Installed Capacity Demand Curve Reset (DCR). Several stakeholders requested that the NYISO provide a consumer impact analysis based on potential changes to the ICAP Demand Curves as a result of the ongoing reset process. The Draft Report for the DCR included preliminary reference point prices for the four NYISO Capacity Areas. The Draft Report also provided preliminary reference point prices for the technologies studied with and without dual fuel capability for ROS and the G-J Locality. Stakeholders requested that Mr. Niazi, who is the Consumer Interest Liaison, perform analysis that would reflect the impact to consumers based on:

- With and without Dual Fuel capability
- With and without Selective Catalytic Reduction (SCR)

Mr. Niazi led a review of the methodology used to conduct the analysis and provided the total estimated capacity costs for the consultant recommended SGT6-5000F5 generating unit with dual fuel capability and equipped with SCR, a gas only unit equipped with SCR and a gas only unit without SCR. The analysis investigated the difference in costs associated with not including dual fuel capability or SCR equipment. The analysis reflected the capital cost and the associated cost through a change in revenues. The cost differences are as follows (cost in millions):

- *SGT6-5000F5 w/o Dual Fuel Capability* \$79.79
- *Gas Only Capability w/o SCR* \$230.75

Mr. Niazi also noted the potential impacts to Reliability and the environment while commenting that there would be no impact on NYISO transparency. A stakeholder opined that the Gas Only analysis did not incorporate the price implications due to inability to run on oil. Another suggested that the analysis failed to account for the impending addition of a large generating station to the G-J Locality. Mr. Niazi noted the comments and will provide a response at a future ICAPWG meeting. To see the complete Consumer Impact Analysis, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-08-02/DCR%20Impact%20Analysis%2008022016%20Final.pdf

Treatment of Capacity Locality Exports

Josh Boles of the NYISO presented an overview of the issue of Installed Capacity (ICAP) exports from a NYISO Capacity Locality for discussion with stakeholders. ISO-NE stakeholders approved rules that would allow importing resources to participate in reconfiguration auctions for 2017/2018. If the new rule is accepted by FERC, an export from a Locality could occur as early as June 2017. This rule change could lead to a NYCA generator, located in the NYISO G-J



Please note: This summary is provided for informational purposes only. It is not intended to be a substitute for the presentations and other information provided by the NYISO or the discussions that take place at the meetings

Capacity Locality receiving a Forward Capacity Market (FCM) obligation of 511MW in ISO-NE's FCM for the year sooner (i.e. 2017/2018) than anticipated. Under the NYISO's current ICAP market construct, when a generator exports Capacity from a Locality to an external Control Area, there would be a matching decrease in supply in that Locality. Potomac Economics (MMU) addressed this potential issue in the 2015 State of the Market (SOM) Report, and recommended megawatts exported to neighboring control areas from import constrained zones be included in the supply to account for the reliability benefits to that Locality. The exporter would be based on the price differential between the Locality and NYCA. The NYISO is evaluating the MMU's proposal, as well as alternative proposals that will produce efficient prices in Localities with exporting resources. The NYISO is evaluating immediate options that could be implemented in time for the Summer 2017 Capability Period. Mr. Boles noted several stakeholder comments and solicited additional comments for consideration. The NYISO will continue to discuss potential approaches as a proposal is developed. Mr. Boles also noted that the NYISO is considering intervening in ISO-NE's proceeding, depending on its ability to get a revised rule in place in time for the Summer 2017 Capability Period. To see the presentation please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-08-02/Capacity%20Locality%20Exports_08022016_Final.pdf

Thursday, August 4, 2016

Market Issues Working Group

Western New York Transmission Constraints

Wes Yeomans of the NYISO presented factors contributing to Western New York transmission constraints. Mr. Yeomans began by providing a timeline of infrastructure changes that have occurred since 2012 and have impacted congestion in Western New York. Generator retirements and decisions to mothball generators have combined with transmission changes to increase Western New York transmission flows. Mr. Yeomans highlighted conditions that affect Lake Erie Loop Flow patterns to demonstrate the associated variability of the Loop Flow patterns. Operational factors were presented and discussed with stakeholders. NYISO has recently introduced enhancements to RTC and RTD to improve Loop Flow issues. Several other operational issues were detailed with their associated impacts to the transmission flows for Western New York. Two potential future enhancements that could help reduce congestion in Western New York are the Western New York Public Policy projects (transmission upgrades) and improved Ontario-Michigan PAR modeling. To see Mr. Yeomans' complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2016-08-04/Western%20Ny%20Congestion%20Official.pdf

Ancillary Services Manual Updates



Please note: This summary is provided for informational purposes only. It is not intended to be a substitute for the presentations and other information provided by the NYISO or the discussions that take place at the meetings

Padam Singh of the NYISO presented proposed updates to the Ancillary Services Manual (AS Manual) to incorporate the implementation of Behind-the-Meter Net Generation (BTM:NG). Mr. Singh highlighted updates to the AS Manual that reflect BTM:NG resource participation. Redline and clean versions of the AS Manual were provided. To see Mr. Singh's complete presentation, please go to:

http://www.nyiso.com/public/markets_operations/committees/meeting_materials/index.jsp?com=bic_miwg

NAESB PKI Digital Certificate Transition Project Update

Diana Ortiz of the NYISO presented an update on the NAESB PKI Digital Certificate Transition project. FERC Order 676-H requires NYISO to transition digital certificates to meet the North American Energy Standards Board (NAESB), Public Key Infrastructure (PKI) standards which increase security and protection of market information systems. Originally scheduled for February 2015, the NYISO has been granted an extension until May 15, 2017 for compliance. Ms. Ortiz provided a matrix comparing the current NYISO digital certificate process to the future NAESB-PKI process. The registration process for the future certificate process was detailed while noting the extensive training that NYISO has provided on the process. The NYISO is continuing to collect necessary information from market participants and will continue to host monthly conference calls to assist in the process. A NAESB Digital Certificate Transition Tutorial has been posted on the NYISO website to assist stakeholders through the process. (http://www.nyiso.com/public/services/market_training/online_resources/NAESB-Digital-Certificate/player.html)

To see Ms. Ortiz's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2016-08-04/MIWG%20NAESB%20Cert%20Project%20Update.pdf

Energy Storage Integration -- Feedback Update

James Pigeon of the NYISO presented feedback received from prior presentations by the NYISO in relation to wholesale grid connected storage resources. Currently, the NYISO has several resource classifications that can accommodate participation of storage in the wholesale markets but requested feedback from stakeholders on other ways energy storage resources may participate in the future. Mr. Pigeon highlighted two proposed programs for 2017 to address some aspects of wholesale energy storage:

- *State of Charge Management*
- *Energy Storage Optimization and Integration*

Feedback received indicated the potential for several configurations of energy storage, such as:

- Stand alone energy storage
- Energy storage combined with:
 - Intermittent energy production
 - Non-intermittent energy production
 - Various meter and equipment configurations



Please note: This summary is provided for informational purposes only. It is not intended to be a substitute for the presentations and other information provided by the NYISO or the discussions that take place at the meetings

Other feedback indicated potential product concepts as well as future service requirements, such as:

- Mobile storage – various scenarios of portable storage
- Fuel constrained bidding concepts – provide optimization of energy storage resources
- Runtime performance considerations – value considerations to expand resource availability
- Storage aggregations – combinations to meet minimum requirements
- Fast response product – help alleviate price spikes
- Bid structure options – charge vs discharge within same hour

Mr. Pigeon noted several comments and suggestions through the meeting and will continue to seek stakeholder feedback through August 19, 2016 in order to develop an initial proposal by the end of September 2016. The NYISO is also currently evaluating comments and suggestions that may fit into proposed 2017 projects. To see Mr. Pigeon's complete presentation, please go to: http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2016-08-04/Energy%20Storage%20Integration.pdf

FERC Filings

August 1, 2016

NYISO filing of a report notifying the Commission that an Emergency State existed in the New York Control Area on July 30, 2016

FERC Orders

August 2, 2016

FERC letter Order accepted the Commercial Agreement (Service Agreement 2283) between Niagara Mohawk Power Corp. and New York State Electric & Gas Corp. effective April 20, 2016, as requested

Link to FERC Filings and Orders:

http://www.nyiso.com/public/markets_operations/documents/tariffviewer/index.jsp