

NYISO Consumer Interest Liaison Weekly Summary

October 1 – October 5, 2018

Notices:

- *The 2018 Fall Economic Conference will be held at the NYISO, 10 Krey Blvd, Rensselaer, NY, on October 25, 2018 from 11:00 AM until 4:00 PM. Adam Kamins from Moody's Analytics will present the National Economic Outlook and the NY State Economic Outlook. After these presentations, the Load Forecasting Task Force will meet to discuss current and upcoming activities.*
- *Additional ICAP/MIWG/PRLWG meetings have been scheduled for October 18, 2018 and October 26, 2018.*

Meeting Summaries:

Monday, October 1, 2018

Joint Electric System Planning Working Group/Transmission Planning Advisory Study Scopes under Consideration for Recommendation for OC Approval

Q#695

South Fork Wind Farm II
Wind/Offshore
40MW W/S
East Hampton, NY

Recommend to the OC for approval

Q#704

Bear Ridge Solar
Solar
100MW W/S
Lockport, NY

Recommend to the OC for approval

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Q#718

Cortland Energy Center Solar Project
Solar
50MW W/S
Cortland County, NY

Recommend to the OC for approval

Q#719

East Light Energy Center Solar Project
Solar
40MW W/S
Montgomery County, NY

Recommend to the OC for approval

Q#720

North Light Energy Center Project
Solar
80MW W/S
Seneca County, NY

Recommend to the OC for approval

Q#721

Excelsior Energy Center Project
Solar
280MW W/S
Genesee County, NY

Recommend to the OC for approval

Q#738

Empire Wind II Project
Wind/Offshore
800MW W/S
Nassau County, NY

Recommend to the OC for approval

Study Reports under Consideration for Recommendation for OC Approval

Q#521

Bull Run Wind II Project
Wind
448.97MW W/S
Clinton County, NY

Recommend to the OC for approval

Q#538

Segment B Interconnection
115kV/345kV

Knickerbocker/Pleasant Valley, NY
Recommend to the OC for approval with 3 abstentions

Q#541

Edic to Ramapo Transmission Interconnection
115kV/345kV
Knickerbocker/Pleasant Valley, NY
Recommend to the OC for approval with 1 abstention

Q#543

NYES Segment B Interconnection
115kV/345kV
Knickerbocker/Pleasant Valley, NY
Recommend to the OC for approval with 2 abstentions

Q#571

Heritage Wind Project
Wind
200.1MW W/S
Orleans County, NY
Recommend to the OC for approval

Q#580

WNY STAMP Load Station Project
345kV Substation
Genesee County, NY
Recommend to the OC for approval

Q#594

NW Energy Project
Battery
60MW W/S
Wyoming County, NY
Recommend to the OC for approval

Q#668

North Bergen Liberty Generating
Gas CC
1171MW S/ 1172MW W
Goethals 345 kV substation
NY, NY
Recommend to the OC for approval

Q#668

Linden Cogen Uprate Project
Gas Uprate
31.9MW S/ 22.7MW W

ERIS Only

NY, NY

Recommend to the OC for approval

Order No. 845 Proposed Compliance Tariff Revisions

Thinh Nguyen of the NYISO provided an update on the Compliance Filing for FERC Order No. 845. Mr. Nguyen led a brief review of the reforms included in the filing and highlighted the substantive revisions to NYISO's compliance approach as presented on August 02, 2018. Order No. 845 became effective on July 23, 2018 with compliance filings due by August 7, 2018. However, the Commission extended the original filing deadline to November 5, 2018. NYISO proposes to request an effective date on or after the date of the compliance filing. Revisions to tariff language were presented and discussed with stakeholders for clarification. To see the complete presentation, please go to:

https://www.nyiso.com/secure/webdocs/markets_operations/committees/oc_tpas/meeting_materials/2018-10-01/07_100118_TPAS_Order%20845%20Presentation_final.pdf

Short Term Improvements to Planning Processes

Yachi Lin of the NYISO led a review of revisions to tariff language for the short term improvements to the planning process. Ms. Lin provided updated tariff sections and highlighted the changes made since the September 19, 2018 version. The discussion with stakeholders led by Ms. Lin was an effort to clarify all changes prior to seeking governance approval at the October BIC and MC. To see the original September 19, 2018 redline and the updated September 27, 2018 redline (in blue) reflecting the incremental changes, please go to

https://www.nyiso.com/public/markets_operations/committees/meeting_materials/index.jsp?com=oc_tpas

Tuesday, October 2, 2018

Joint Market Issues/Installed Capacity/Price Responsive Load Working Group

Constraint Specific Transmission Shortage Pricing

Jennifer Boyle of the NYISO presented the Constraint Specific Transmission Shortage Pricing Report that included the background and the conclusions of the study.

Ms. Boyle went over the NYISO recommendation that enhancements to the current transmission constraint pricing logic be pursued to develop a more refined approach that considers voltage class, location and variations in the CRM values considering overall comprehensive shortage pricing logic. The key objectives for the potential enhancements were identified as:

- *Ensuring that transmission shortages are appropriately valued, based on the severity of the constraint, considering tradeoff costs with meeting other market constraints such as Operating Reserves;*
- *Improving transparency and predictability of the methodology used to develop transmission constraint prices; and*
- *Developing a structure that is feasible, robust and reliable.*

Ms. Boyle noted that each criteria must be considered as interconnected variables to help manage transmission constraints. Considering how the different criteria interplay and impact each other is imperative when designing enhancements to the current graduated Transmission Shortage Cost mechanism.

The next step is to develop a Market Design Concept Proposal (MDCP). The NYISO will determine the methodology to set price and MW values for enhanced transmission demand curves through October and November 2018. It is anticipated that the MDCP will be finalized and presented to

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stakeholders in December 2018. A timeline was provided with a Market Design Complete and stakeholder approval by June 2019. The implementation phase is currently scheduled for 2023 as dictated by the results of the Project Prioritization Process. The NYISO acknowledged that once the final Market Design is approved, this timeline could be re-evaluated. To see the complete presentation, please go to:

https://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-10-02/CSTCP%20Study%20Review%20-%2010022018%20MIWG%20Final.pdf

To see the Constraint Specific Transmission Shortage Pricing Report in its entirety, please go to:

https://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-10-02/Constraint%20Specific%20Transmission%20Shortage%20Pricing%20-%20Paper_Final.pdf

Automate ICAP Import Rights

Joseph Nieminski of the NYISO presented the automation process that will apply to Installed Capacity (ICAP) Import Rights. The process to automate the ICAP Automated Market System (AMS) will be in place for the Summer 2019 Capability Period. The ICAP AMS “First Come First Serve” Import Rights process will replace the fax process. Market Participant’s (MP’s) will be able to fulfil their obligations to provide supporting bilateral contracts through an automated bilateral confirmation process. Currently that process is performed manually by NYISO staff.

Mr. Nieminski led a review of the changes to the ICAP Manual that provide step-by-step instructions for the updated process. Market Participants will have an interface to create, confirm, and return requests for First Come First Serve (FCFS) Import Rights. FCFS Import Right Requests will be prioritized in the order that they are received in the AMS.

The NYISO will incorporate stakeholder input and return to a future ICAPWG meeting to discuss any additional updates, if required. The ICAP Manual will be presented to a future ICAPWG meeting for stakeholder approval.

To see the complete presentation, please go to:

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

Day-Ahead Demand Response Program Updates

Sarthak Gupta of the NYISO presented updates to the Day-Ahead Demand Response Program Manual (DADRP Manual) that incorporated the following changes resulting from FERC Order No. 745 compliance:

- Monthly Net Benefits Test Offer Price
- Economic Customer Baseline (ECBL)
- Cost Allocation Changes

The update to the manual will also incorporate Technical Bulletin (TB) 237, describing the Local Generator Requirements in the DADRP. This will allow the NYISO to retire TB237. The revised DADRP registration packets updates will also be included in the update.

Mr. Gupta led a review of the changes by manual section while noting stakeholder feedback.

To see the complete presentation, please go to:

https://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-10-02/DADRP%20Manual%20Updates_2018_10_02_MIWG.pdf

Review of Summer 2018 EDRP/SCR Event Pricing Outcomes

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Michelle Gerry of the NYISO presented the pricing outcomes resulting from the EDRP/SCR events called during Summer 2018. Ms. Gerry led a brief review of the Scarcity Pricing rules prior to providing a summary of the three EDRP/SCR events of July 2, August 28 and August 29, 2018. All three events were called for Zone J, NYC, only. July 2, 2018 was called for five hours, 13:00 through 17:59, whereas August 28 and 29, 2018 were called for six hours each, 12:00 through 17:59. During the July 2, 2018 event, the average scarcity reserve requirement was 337 MW and no real-time pricing intervals had \$500 clearing prices for 30-minute reserves. Graphs were provided illustrating the relationship of the Demand Response MW to 30 Minute Reserve requirement and to the 30 Minute Reserve scheduled MW.

During the August 28 and 29, 2018 events, the average scarcity reserve requirement was 328 and 326 MW, respectively. In addition, August 28 and 29, 2018 had 13 and 2 real-time pricing intervals, respectively, with \$500 clearing prices for 30 Minute Reserves. Graphs were provided to illustrate the instances in HB16 and HB17 on August 28, 2018 and HB15 on August 29, 2018.

To see the complete presentation, please go to:

https://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-10-02/Review%20of%202018%20Scarcity%20Pricing%20Outcomes%20MIWG%2010022018%20FINAL.pdf

Consumer Impact Analysis: Additional Analysis of Energy Storage Resource Integration

Tariq Niazi of the NYISO presented a follow-up to the August 30, 2018 Consumer Impact Analysis of Energy Storage Resource (ESR) integration into the wholesale markets. During the August 30, 2018 presentation, stakeholders noted that the NYISO should have limited ESR injections to four hours per day.

The NYISO conducted a new analysis limiting the injection capability to a maximum of four hours per day. Mr. Niazi noted that using a 70% efficiency factor, potential savings ranged from a low of \$29.3M to a high of \$214M, based on an availability factor of 20%, 30% and 40% respectively.

To see the complete presentation, please go to:

https://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-10-02/CIA%20-%20Additional%20Analysis%20of%20Storage%20Integration-Final.pdf

Thursday, October 4, 2018

System Operations Advisory Subcommittee

NYISO Operations Report – September 2018

Peak Load:

The peak load for the month of 31,456 MW occurred on Wednesday, September 5, 2018 at HB16. The Operating Reserve requirement during the peak was 1,965MW resulting in a minimum total Operating Capacity requirement of 33,421 MW.

Reserve Requirements:

Reserve Requirement	10 Min Sync	Non Sync	30 Min
For Hour	655	1,310	1,965
DSASP Cont.	1,001	1,830	3,085
	56	0	56

Major Emergencies: None

Alert States: 17

1 System Frequency Low

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- 4 ACE Greater than (+or-) 500MW
- 7 Emergency Transfer Declared
- 4 Shortage of 10 Minute Synchronized Reserve
- 1 Exceeding Central East Voltage Contingency Limit

The Alert State was declared 8 times during September 2017

Thunderstorm Alerts: 1 Total 2:30 Hours

Reserve Activations: 13

Emergency Actions:

Purchases: 251MW purchase from IESO 9/3/2018 to support ISONE

Sales: 251MW sale to ISONE 9/3/2018

TLR 3 Declared: 2 for a total of 7:20 hours

Friday, October 5, 2018

Budget and Priorities Working Group

2019 NYISO Budget Overview

Cheryl Hussey of the NYISO presented updated information on the 2019 proposed budget. Ms. Hussey noted that there were no changes made to the dollar requirements or the assumptions in this update. The first substantive update to the presentation provided a pie chart to illustrate a summary of the budget increases for 2019. The second update was provided in response to a stakeholder request to gain a better understanding of the allocation of NYISO personnel. Ms. Hussey provided a pie chart to illustrate the headcount by department to help clarify the structure of the NYISO. Additional details were also provided for debt service tables in the presentation for accuracy.

Ms. Hussey also responded to stakeholder feedback on the request for an addition to the Stakeholder Services staff. Ms. Hussey provided statistical information reflecting a decrease in headcount from 2012 and an increase in the volume and complexity of stakeholder issues due to impending changes to the markets.

To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2018-10-05/Draft%20Budget%20Presentation.pdf

2018 Project Schedule Milestone Update

Robb Pike of the NYISO provided an update on the milestones for the 2018 project schedule. Mr. Pike noted that the NYISO continues to employ color coding in the update process to distinguish changes to project status and inform on continuing or upcoming stakeholder discussion. Mr. Pike led a review of several project status changes and made note of upcoming or continuing project discussions.

Status Updates (items in blue indicate continued or upcoming discussion)

<i>Public Website Content Management Platform & Redesign</i>	<i>At Risk/Delayed</i>
<i>Alternative Methods for LCRs</i>	<i>At Risk/Delayed</i>
<i>Performance Assurance</i>	<i>Complete</i>
<i>CRIS for External – ROS Trans. Invest.</i>	<i>Complete</i>
<i>Competitive Entry Exemption for Increased CRIS</i>	<i>Complete</i>
<i>Model 100+kV Transmission Constraints</i>	<i>Complete</i>
<i>Constraint Specific Transmission Demand Curves</i>	<i>Complete</i>
<i>Energy Storage Integration and Optimization</i>	<i>At Risk/Delayed</i>
<i>Laptop Refresh and Upgrade</i>	<i>Complete</i>
<i>Application Platform Upgrade Phase V</i>	<i>At Risk/Delayed</i>
<i>Application Testing Improvements Phase II</i>	<i>At Risk/Delayed</i>

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<i>Microsoft System Upgrade</i>	<i>At Risk/Delayed</i>
<i>Network Infrastructure Upgrade</i>	<i>At Risk/Delayed</i>
<i>Planning High Performance Computing Platform Upgrade</i>	<i>Complete</i>
<i>Expense Report Automation</i>	<i>Complete</i>
<i>Vendor Management Tool</i>	<i>Complete</i>
<i>EMS/BMS System Upgrade</i>	<i>Critical/Overdue</i>
<i>Load Forecaster Upgrade and Buildout</i>	<i>Complete</i>
<i>EPG PMU Enhancements</i>	<i>At Risk/Delayed</i>
<i>Model On Demand Upgrade and Buildout</i>	<i>Complete</i>
<i>Automate ICAP Import Rights</i>	<i>No Status Change</i>
<i>BSM Repowering</i>	<i>No Status Change</i>
<i>FERC Order 745: Monthly Net Benefits</i>	<i>No Status Change</i>
<i>DER Participation Model</i>	<i>No Status Change</i>
<i>NYISO Pilot Framework</i>	<i>No Status Change</i>
<i>Integrating Public Policy</i>	<i>No Status Change</i>
<i>Comprehensive System Planning Process Review</i>	<i>No Status Change</i>

To see the complete NYISO presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2018-10-05/2018%20Project%20Schedule%20Milestone%20Update.pdf

FERC Filings

There were no filings to FERC by the NYISO for this week.

FERC Orders

October 5, 2018

Order accepted revisions to Services Tariff Sections 2.12 and 5.11 effective October 9, 2018

October 5, 2018

Order accepted revisions to Services Tariff Sections 2.12 and 5.11 regarding the methodology used to determine Locational Installed Capacity Requirements in the ICAP market effective October 9, 2018

Filings and Orders:

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