

NYISO Consumer Interest Liaison Weekly Summary

February 29 – March 4, 2016

Notices:

- A solicitation letter for projects to address the AC Transmission Public Policy Transmission Needs is accessible here. As described in the request, proposals must be sent electronically to publicpolicyplanningmailbox@nyiso.com. Any supplemental hard copy information should be sent to Zach Smith, Director of Transmission Planning, 10 Krey Boulevard, Rensselaer, New York 12144.
- Redline versions of <u>TB-064</u> 'Changing from Daylight Savings to Standard Time' and <u>TB-088</u> 'Changing from Standard Time to Daylight Savings Time' have been posted to the <u>NYISO Technical Bulletins</u> webpage under the 'Technical Bulletins>Under Review' folder. The date for Spring 2016 is March 13.
- The NYISO has received and posted on its website a "Confirmation of NRG Huntley 67 and 68 Retirement", which was sent to the NYISO by NRG Energy, Inc regarding its Huntley 67 and Huntley 68 electric generation facilities located in Tonawanda, New York. The Confirmation of Retirement Notice can be found on the NYISO's Planning webpage at: Confirmation of Retirement

Meeting Summaries:

Monday, February 29, 2016

Budget and Priorities Working Group

2015 Draft Budget vs. Actual

Cheryl Hussey of the NYISO presented NYISO's 2015 draft budget vs. actual results contingent upon the completion of NYISO's financial statement audit (scheduled for mid-March). NYISO experienced an over collection of \$4.4M on 2015 Rate Schedule 1 revenues. Draft budget vs. actual results reflect a spending under-run of \$3.9M. Pending completion of NYISO's financial statement audit, NYISO staff recommends that NYISO retain the \$8.3 M of funds remaining from the 2015 budget cycle to pay down the principal amount of outstanding debt. To see Ms.



Hussey's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2016-02-29/Agenda%2002_December%20Budget%20vs%20Actual%20Final.pdf

2015 Corporate Incentive Goals

Emilie Nelson of the NYISO presented the results of the NYISO corporate incentive goals for 2015. Each year the NYISO is assigned a list of goals to achieve in order to receive the pay-atrisk portion of NYISO compensation. Ms. Nelson explained each of the goals and reported the level of success by the NYISO in reaching or surpassing each goal. For 2015 the NYISO finished at 118% of total payout. To see the one page results summary of the 2015 NYISO incentive goals please go to:

 $\underline{http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2016-02-29/2015\%20Corporate\%20Incentive\%20Goals.pdf$

2015 Project Schedule Update

Ryan Smith of the NYISO presented the final update for the 2015 Project Schedule. Several projects had status changes in the fourth quarter. A list of the projects that were completed prior to the end of the year was provided. All projects with a 2015 completion date were completed with the exception of:

- NAESB Public Key Infrastructure -- Critical / Overdue
- Smart Grid Portal -- Critical / Overdue
- Enhanced Forecasts for Buyer Side Mitigation (incentive goal#6) -- Critical/Overdue
- Solar Study -- The draft study results are expected to be available for comment in March

To see the complete list of projects for 2015 please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2016-02-29/Agenda%2004_2015%20Project%20Schedule%20Update.pdf

2017 Project Prioritization Process

Ryan Smith of the NYISO presented proposed improvements of the project prioritization process; incorporating stakeholder feedback received and lessons learned following the completion of the process in 2015. Several improvements to the process are being proposed by the NYISO. One change is to exclude mandatory projects from the scoring process. Another is to introduce sector weighted scores to be used in addition to the raw scores. Additional proposed improvements include the following:

- Weights based on committee voting sector weights
- Would not apply subsector weights
- Quorum concept would not apply
- Affiliates and Non-Voting Entities would be excluded from sector weighted scoring but would be included in the raw scores
- Raw scores and weighted scores would be reported



• Appeal criteria in NYISO scoring will be triggered by either the raw score or the weighted score reaching defined thresholds

Proposed changes for the prioritization criteria include changing criteria weights and incorporating weighted scores into the Appeal thresholds. A chart was provided to illustrate how the update would be applied.

The NYISO will continue to set aside one meeting to focus on stakeholder advocacy. This period would be complimented by soliciting stakeholder advocacy in writing and including the feedback with the posted meeting materials.

Additional proposed process updates include identifying project dependencies and/or prerequisites for other proposed projects in advance of the stakeholder scoring deadline and providing cost and benefit information in advance of the scoring deadline.

A timeline was provided to illustrate when the process steps would be conducted under the proposal beginning in early May and following through to Board of Directors approval decision in November. The NYISO will continue to accept feedback throughout the process with an additional opportunity for stakeholder discussion and review at the March 31, BPWG meeting prior to a presentation to the April 27 MC meeting. To see Mr. Smith's presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/mc_bpwg/meeting_materials/2016-02-29/Agenda%2005_2017%20Project%20Prioritization%20Process.pdf

Tuesday, March 1, 2016

Market Issue Working Group

Coordination Agreement between ISO-NE and NYISO - Ministerial Clean Up

Ethan Avallone of the NYISO presented revisions to the Coordination Agreement between ISO-NE and NYISO required to incorporate Coordinated Transaction Scheduling (CTS). Mr. Avallone highlighted the following changes:

- Revised the definition of "Transfer Limit"
- Removed two paragraphs from Section 6.5 (Subject addressed elsewhere in Section 6.5) The NYISO will seek governance approval on these revisions at the March 16, 2016 BIC and the March 30, 2016 MC followed by a Board of Directors approval and filing with FERC.

Hybrid GT Pricing Improvements

Ethan Avallone of the NYISO presented proposed revisions to the existing hybrid Gas Turbine (GT) pricing logic. Potomac Economics (MMU) recommended that the NYISO improve upon the existing hybrid GT pricing logic in its 2014 State of the Market (SOM) report. SOM reports in 2011, 2012 and 2013 also recommended the change. Mr. Avallone explained how the NYISO commitment software evaluates GTs in the "first ideal" and "second ideal" passes and why GTs cannot currently set prices if they are the marginal generator. GTs are unable to operate between zero and full output (block loaded) and therefore cannot be scheduled to generate at less than full output. In the NYISO scheduling system, these block loaded GTs shift the supply curve in the second ideal pass which may result in a different price being calculated between the first and



second ideal passes. The MMU's recommendation is to allow GTs to be eligible to set price in the second ideal pass to fully reflect the cost of the marginal resources scheduled to satisfy load and manage congestion. The NYISO intends to collect data describing the current methodology and supply Real Time Dispatch (RTD) metrics surrounding an alternative design for discussion with stakeholders on methodology for improving the pricing of hybrid GTs. Some stakeholders opined that it would be helpful for the NYISO to return to a future MIWG meeting with information on the data to be used for analysis prior to the analysis being done, for stakeholder evaluation and input, due to the complexity of the scheduling process. Mr. Avallone responded that the NYISO would consider the issue prior to the next scheduled meeting. To see Mr. Avallone's presentation, please go to:

 $\underline{\text{http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2016-03-}$

 $\underline{01/Hybrid\%20GT\%20Pricing\%20Improvements\%20March\%202016\%20MIWG\%20FINAL.pdf}$

<u>Energy Storage – Market Integration and Optimization</u>

James Pigeon of the NYISO presented the initiative to evaluate the programs that energy storage resources can participate and assess potential needs for expanding and/or enhancing such existing programs. Currently, the NYISO has several resource classifications that can accommodate participation of storage in the wholesale markets:

- Energy Limited Resource (ELR)
- Limited Energy Storage Resource (LESR)
- Demand Side Ancillary Services Program (DSASP)

The NYISO is seeking stakeholder input to help it develop a long term plan for the integration of storage resources into the market place. Mr. Pigeon led a review of each of the programs listed above, as well as the Special Case Resources (SCR) program, and highlighted how the current programs could be revised to allow the participation of storage resources. The NYISO is encouraging stakeholder feedback throughout the process. Comments can be sent to either jpigeon@nyiso.com or mdesocio@nyiso.com. To see Mr. Pigeon's presentation, please go to: http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg/meeting_materials/2016-03-01/Energy%20Storage%20-

%20Market%20Integration%20and%20Optimization%20MIWG.pdf

Thursday, March 3, 2016

Installed Capacity Working Group

Renewables and Self Supply Compliance Filing – Tariff Review

Julia Popova of the NYISO presented the results of the study on the proposed exempt renewable technologies. Ms. Popova led a review of the analysis that is the basis for the proposal by the NYISO to respond to the FERC order from October 9, 2015 on the renewable and self supply exemption. The NYISO performed the analysis of which technologies should receive Exempt Renewable Technologies status upon the effectiveness of the compliance tariff revisions and concluded that wind and solar technologies should be exempt. Other commercially feasible



renewable and intermittent technologies may request project specific exemption evaluation. In response to a question of why run of river generators were not studied, Ms. Popova responded that costs to build and operate run of river generation vary significantly based on plant design and location specifics. This type of renewable and intermittent resource may be studied for the Exempt Renewable Technologies status next Demand Curve Reset Year. Ms. Popova detailed the framework and assumptions for the study and included the sources of data utilized. Estimated project costs for wind and solar generation facilities were evaluated against anticipated revenues available in the Energy and Capacity markets, public subsidies available to such resources, and the projected cost savings load may experience due to potential capacity market price suppression effects. The results indicated that wind and solar installations have limited or no incentive to suppress Installed Capacity prices and therefore are eligible for the Renewable Exemption from Buyer Side Mitigation. To see Ms. Popova's presentation, please go to: https://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-03-

 $\frac{03 / Renewables \% 20 Exempt \% 20 Technologies \% 20 Numerical \% 20 Analysis \% 20 ICAPWG \% 20030}{32016-C.pdf}$

NYISO ICAP 2015/2016 Demand Curve Reset -- Updates

Paul Hibbard of Analysis Group (AG) presented updates to the presentation delivered to the ICAPWG on February 19, 2016. To ensure symmetry and equal representation of historical periods in the initial filing and annual updates, AG proposed to revise the calculation of net Energy and Ancillary Services (EAS) revenues to reflect 36 months of historical data using a September through August period (e.g., for the 2017/2018 Capability Year, data from September 1, 2013 through August 31, 2016 would be used). The methodology for estimating the GDP Deflator component of the composite escalation factor for gross cost of new entry (CONE) will be revised to calculate the year over year change in the most recent quarter of final data available to maintain consistency in the assumptions across the various components used to calculate the escalation factor. Rate Schedule 1 fees will be included in the annual updates process to increase accuracy of the update. The final change from the previous presentation is that the Level of Excess (LOE) scaling factors will be applied to historic operating reserves prices, consistent with energy market prices. This update reflects the co-optimization of energy and operating reserves. Mr. Hibbard noted that there will be no change to the methodology for determining the LOE scaling factors that was presented at the February 19, 2016 ICAPWG meeting. Although various alternatives were identified by stakeholders, including eliminating the LOE adjustment, making the LOE dependent on updated system conditions (e.g., system excess capacity levels) and alternative modeling approaches to capture the LOE adjustments, the proposed approach balances tradeoffs among alternative approaches to accounting for the tariff-prescribed LOE. To see the complete AG presentation, please go to:

 $\frac{https://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-03-03/agenda\%203\%20AG\%20DCR\%2002\%2029\%202016\%20ICAPWG.pdf$



NYISO ICAP 2015/2016 Demand Curve Reset – Additional Backcasting Analysis

Todd Schatzki of Analysis Group (AG) presented additional backcasting analysis as requested by stakeholders. Mr. Schatzki explained that the backcasting analysis performed by AG included a comparison of actual historical reference prices to estimated (backcast) reference prices that incorporate the updating of two reference price elements:

- 1. Installed capital cost is adjusted annually across the entire 2009 to 2015 period based on the proposed composite escalation factor
- 2. Net Energy and Ancillary Services (EAS) revenue is updated annually based on data from the prior three-years of historic market data

AG's backcast of reference prices hold constant all other elements of the historic reference price calculations. Mr. Schatzki detailed what is and is not included in the backcasting process while providing specific information in response to stakeholder questions. Graphs were provided to illustrate the relative variability of the proposed methodology in comparison to the actual historical values of ICAP Demand Curve parameters. To see Mr. Schatzki's complete presentation please go to:

https://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-03-03/AG%20DCR%20Backcasting%2003032016%20ICAPWG.pdf

Overview of Draft Tariff Revisions to the ICAP Demand Curve Reset Process

Randy Wyatt of the NYISO presented an overview of the draft tariff revisions to the ICAP Demand Curve Reset (DCR) process. The proposed revisions are required to address Analysis Group's recommended changes to the ICAP DCR process, which the NYISO reports. Revisions include:

- Created a new subsection 5.14.1.2(b) to address the proposed four year DCR process with annual updates
- Methodology for calculating Net EAS revenues
- Provides for Annual Updates
 - Net EAS revenues
 - o Gross Cost of New Entry (CONE)

Updated gross CONE and net EAS revenue values are used in determining the ICAP Demand Curves for the applicable Capability Year. The Zero-crossing points are determined as part of the reset and remain fixed for the four year period.

Mr. Wyatt noted stakeholder comments and requested additional comments be sent to deckles@nyiso.com. The NYISO will return to the March 10, 2016 with additional draft revisions to the Market Services Tariff Attachment H to address proposed process changes. The NYISO anticipates a BIC vote on the proposed DCR process changes at the March 16, 2016 BIC meeting. To see Mr. Wyatt's presentation and redline tariff language, please go to: https://www.nyiso.com/public/markets_operations/committees/meeting_materials/index.jsp?com=bic_icapwg



Friday, March 4, 2016

Transmission Planning Advisory Subcommittee

Central East Voltage and Stability Analysis for TOTS Series Capacitors

David Mahlmann of the NYISO presented the study on Central East Voltage and Stability Analysis for TOTS series capacitors. Mr. Mahlmann previously presented the study at the February 1, 2016 TPAS meeting to solicit stakeholder feedback. The NYISO implemented some minor ministerial revisions and is returning to the TPAS for a recommendation to forward the study to the Operating Committee (OC) for approval. The study will be presented next at the March 10, 2016 SOAS prior to the March 17, 2016 OC for approval. To see the presentation of the study please go to:

https://www.nyiso.com/secure/webdocs/markets_operations/committees/oc_tpas/meeting_materials/2016-03-04/03a_Central%20East%20-%20TPAS-SOAS-OC%20-2016-02-23.pdf

Study Scopes

O#458

NS Interconnection Project Full SRIS HQ -- Albany County -- Queens, NY 1000MW Sent to Operating Committee for approval

Q#523

Dunkirk Unit 2 Project Partial SRIS Dunkirk, NY 75MW Summer 75MW Winter Sent to Operating Committee for approval

O#524

Dunkirk Unit 3 & 4 Project Full SRIS Dunkirk, NY 370MW Summer 370MW Winter Sent to Operating Committee for approval

Q#525

Western NY Energy Link – Public Policy Transmission Project Niagara County, NY Sent to Operating Committee for approval

Proposed Modifications to Large Facility Regulatory Milestone Requirements

Thinh Nguyen of the NYISO presented proposed modifications to the Large Facility Regulatory Milestone Requirements. Currently, a Large Facility must satisfy its regulatory milestone in order to be eligible to enter a Class Year Study. The Large Facility must also satisfy its regulatory milestone within two years from Operating Committee (OC) approval of its Interconnection System Reliability Impact Study (SRIS). The NYISO proposes two modifications to the Attachment S regulatory milestone requirements.



First, NYISO proposes to allow a project more time to meet its regulatory milestone:

- Rather than requiring to meet the regulatory milestone within 2 years from OC-approval of its SRIS, NYISO proposes to allow a project 3 Class Years to achieve its regulatory milestone
- However, once a project has an OC-approved SRIS, its "Class Year clock" begins to run (i.e., it must enter one of the next three Class Years).
- A project will not be subject to withdrawal for failure to meet the regulatory milestone requirement if it meets its regulatory milestone within 90 days of the start date of the 3rd Class Year after OC-approval of its SRIS

Second, NYISO proposes to allow a project to provisionally enter a Class Year without having met its regulatory milestone requirement subject to the following:

- It must have an OC-approved SRIS
- If, within 90 days of the Class Year Start Date, the project has not met its regulatory milestone, it will be withdraw from the Class Year
- Provisional entry (even if withdrawn due to failure to meet the regulatory milestone within 90 days of the Class Year Start Date) will count as one of the project's two Class Year "bites of the apple" (the rule under which a project can enter two of the next three Class Years once it has an OC approved SRIS).

Mr. Nguyen detailed the proposed tariff revisions and provided redline versions for stakeholder discussion. The NYISO intends to file the revisions to FERC with the goal of receiving a FERC Order prior to the next Class Year Study. To see Mr. Nguyen's presentation, please go to: https://www.nyiso.com/secure/webdocs/markets_operations/committees/oc_tpas/meeting_materials/2016-03-

04/07b_3%204%202016%20TPAS_Regulatory%20Milestone%20Proposal_Final.pdf

FERC Filings

March 4, 2016

NYISO filing of report on Price Formation in Energy and Ancillary Services Markets Operated by RTOs and ISOs

March 2, 2016

Amendment to February 19, 2016 notice of termination of SGIA No. 1483

FERC Orders

March 4, 2016

FERC letter order accepting NYISO's 1/28/16 compliance filing establishing an effective date of 2/11/16 for certain tariff definitions related to the Comprehensive Shortage Pricing project

March 3, 2016



FERC letter order accepting NYISO's 1/28/16 compliance filing establishing an effective date of 2/11/16 for transmission shortage cost tariff provisions

March 1, 2016

FERC order accepting proposed tariff revisions to improve NYISO's existing scarcity pricing logic, and requiring a compliance filing to clarify certain provisions in 30 days

Link to FERC Filings and Orders:

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