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NYISO Consumer Interest Liaison Weekly Summary

February 15 – February 19, 2016

Notices:

- *The Gap Solution Solicitation related to the FitzPatrick Generator Deactivation Assessment is now posted under Reliability Planning Studies at the link below: http://www.nyiso.com/public/webdocs/markets_operations/services/planning/Planning_Studies/Reliability_Planning_Studies/Reliability_Notices/FitzPatrick_Gap_Solution_Solicitation_20120216.pdf*

- *An ICAP Working Group meeting has been scheduled following the Management Committee meeting on February 24. The purpose of the meeting is to review the Renewables & Self Supply Compliance Filing Tariff Language.*

Meeting Summaries:

Friday, February 19, 2016

Joint Electric System Planning/Installed Capacity Working Groups

FitzPatrick Generator Deactivation Assessment

Dana Walters of the NYISO presented the James A. FitzPatrick generator deactivation assessment for discussion with stakeholders. Entergy provided a Generator Deactivation Notice for the proposed retirement of the James A. FitzPatrick Nuclear Generating Facility ("FitzPatrick"), which the NYISO determined to be complete on November 13, 2015. In accordance with the pending tariff revisions from the October 2015 RMR compliance filing, the NYISO performed reliability analysis to determine whether a Reliability Need will result from the deactivation. NYISO issued the Generator Deactivation Assessment on February 11, 2016. The identified resource deficiency equates to at least an additional 325 MW of capacity statewide by 2020, depending on de-rations including forced outage rates and the location of the resources. Although the need first arises for 2019, the year 2020 was selected to allow for a longer period to provide a permanent solution. A stakeholder raised a question as to whether or not the proposed New York State Clean Energy Standard (CES) provision for nuclear Zero Emission Credits (ZECs) would be considered in the solution evaluation process. Mr. Walters explained that the

ZEC program is tentative with no clear timeline so therefore will not be considered in the solution evaluation process. NYISO issued a solicitation for Gap Solutions on February 16, 2016. Responses are due March 17, 2016. The NYISO has commenced the Gap Solution process because the identified statewide resource deficiency cannot be timely addressed within the biennial reliability planning process. If necessary, the NYISO may enter into a Reliability Must Run (RMR) Agreement with one or more generators found to be viable and sufficient. The NYISO may cancel a Gap solution if its associated reliability need has been addressed. To see the complete NYISO presentation, please see: http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-02-19/Fitz%20Deactivation.pdf

Review of Existing Generator Gap Solutions

Michael Lavillotti of the NYISO presented the next steps for the existing generation data submission in response to the determination of reliability resource adequacy. Mr. Lavillotti noted that the NYISO reliability assessment determined that the retirement of the James A. Fitzpatrick nuclear station would result in a NYCA wide resource adequacy need of approximately 325 MW that would begin in 2019. NYISO is proceeding in accordance with the pending revisions to the Reliability Planning Process as found in the NYISO's Reliability Must Run (RMR) compliance filing submitted on October 19th, 2015. Solicitation letters for Responsible Transmission Owners and Developers were sent out to stakeholders and posted on the NYISO website. In accordance with its pending RMR tariff rules, the NYISO has identified Mothballed and ICAP Ineligible Forced Outage (IIFO) generators that must submit information to permit NYISO to evaluate them as potential solutions. A list of Mothball/IIFO generators identified as potential solutions was provided. Generators on this list will have 20 calendar days to respond with the required information after they are sent an official request from the NYISO. Mr. Lavillotti noted that parties not identified by the NYISO as a potential solution have an opportunity to offer themselves as a solution. To see the complete presentation, please go to: http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-02-19/Existing%20Generators.pdf

NYISO ICAP 2015/2016 Demand Curve Reset

Todd Schatzki of Analysis Group (AG) presented details on proposed changes to the approach used to set the ICAP demand curve. The proposed changes include:

- Periodicity
- Annual Updates
- Net Energy and Ancillary Services (E&AS) revenue estimation

The AG recommendation on periodicity is to switch from the current three-year period to a four-year period. Mr. Schatzki presented a review of the alternatives and listed the benefits gained with a change to a four-year period. It was noted that the move to a longer ICAP Demand Curve Reset (DCR) period increases the value of incorporating annual updates to the gross cost of new entry (CONE) and net ~~(~~E&AS~~)~~ revenues.

Mr. Schatzki presented the proposed methodology to be used in estimating E&AS revenues and determining a level of excess adjustment. The methodology is expected to reduce complexity and improve transparency of the net E&AS revenue calculations as well as enable the periodic updating of net E&AS revenue values to reduce forecast uncertainty. Several stakeholders questioned the method of employing a fixed scaling factor in relation to the level of excess. They expressed the opinion that as the level of excess changes over time, use of a fixed scaling factor may not be appropriate. Mr. Schatzki responded by opining that a fixed scaling factor is adequate, while reducing complexity associated with updating the level of excess adjustment annually. Mr. Schatzki provided extensive detail on the proposed net E&AS revenue model utilizing historic LBMPs along with other data. Based on stakeholder feedback received at the last ICAPWG and further review of futures data, a futures adjustment is not recommended at this time.

The proposal for annual updates would update ICAP Demand Curve values annually, using pre-defined methodologies, based on publicly accessible market data. The annual updates would require three steps:

- *Collect updated historical information on energy, fuel and emission allowance prices*
- *Estimate net E&AS revenues using a new E&AS revenue model and update gross CONE using an escalation factor*
- *Update Demand Curve parameters*

AG provided tables and flowcharts to illustrate how the annual update process would function and listed the data sources and formulas to be used for the process. Input data that would remain fixed throughout the process, including data developed by Lummus Consultants, was detailed. The gross CONE escalation factor process was provided and discussed with stakeholders, as was the updates and adjustments to the ICAP Demand Curve parameters and the winter-to-summer ratio (WSR) used in calculating ICAP Demand Curve reference point prices.

An appendix was provided with detailed numeric examples on the proposed net E&AS revenue model. To see the complete AG presentation, please go to:
http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-02-19/AG%20DCR%2002%2019%202016%20ICAPWG%20Final.pdf

Status Update on Peaking Unit Technology Capital Cost Estimates

Tom Vivenzio of Lummus Consultants International (Lummus) presented an update on the analysis of peaking unit technology for the Demand Curve Reset (DCR) recommendation. The peaking unit technology options recommended by Lummus are:

- Aeroderivative CT - GE LMS100PA+
- Frame Simple Cycle – Siemens SGT6-5000F5
- Reciprocating Internal Combustion Engine (RICE) – Wartsila 18V50SG/DF

Mr. Vivenzio explained that the frame unit "H" class in simple cycle was eliminated due to lack of commercial operating experience in this configuration. Ms. Richert led a review of manufacturer differences within each technology and explained why Lummus chose each particular unit.

Bill Frazier of Lummus led a discussion on plant cooling requirements and explained how each technology accomplishes the cooling process. Mr. Frazier presented the process that Lummus used to evaluate the operating hour restrictions to avoid Major Source Status. Operating hour restrictions were determined based on technology and location based on NYSDEC and Federal regulations. Mr. Frazier provided data that compared the full load NOx and VOC emissions under both natural gas and ultra-low sulfur diesel firing for the three technologies under consideration. In response to a stakeholder request, Mr. Frazier agreed to supply the results for natural gas only. Tables were also provided and discussed with stakeholders depicting the Ozone Nonattainment Classification and Major Source Thresholds by each zone. Lummus provided the air permit operating hour restrictions for the three technologies with explanations included. Mr. Frazier also noted that in reference to an SCR on simple cycle frame combustion turbines that it is Lummus' opinion that there have been no new developments that would change the conclusion that the F class frame unit with SCR is a viable technology for gas-only or dual-fuel projects in all load zones.
Mr. Vivenzio concluded the presentation with the preliminary conceptual design assumptions and provided data on preliminary capital cost estimates for the three recommended technologies.
To see the complete Lummus presentation, please go to:
http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2016-02-19/Peaking%20Unit%20Capital%20Costs%202-19-16.pdf

FERC Filings

February 19, 2016

NYISO and Niagara Mohawk Power Corporation (NMPC) joint filing of a notice of termination of SGIA (Service Agreement No. 1483) among NYISO, NMPC and Green Power Energy LLC

February 18, 2016

NYISO Section 205 filing of revisions to tariff requirements of the Public Policy Transmission Planning Process

February 17, 2016

NYISO compliance filing to provide the basis and general framework for the methodology the NYISO will use to project energy and ancillary service revenues for controllable transmission lines in its buyer-side mitigation determinations

FERC Orders

February 18, 2016

FERC notice granting the NYISO motion for extension of time to submit its compliance filing implementing a self-supply exemption and a renewable resources exemption to NYISO's buyer-side market power mitigation rules up and including March 14, 2016

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February 18, 2016

FERC order accepting proposed tariff revisions subject to the condition that NYISO revise section 23.3.1.1.2 to ensure that it apply the verification requirement to the proposed exemption from physical withholding evaluation for generators that cannot supply capacity in the real-time market where doing so would require the use of unauthorized natural gas or penalty natural gas

Link to FERC Filings and Orders:
http://www.nyiso.com/public/markets_operations/documents/tariffviewer/index.jsp