Draft Minutes

New York State Reliability Council, L.L.C. (NYSRC)

Executive Committee

Meeting No. 215 – March 10, 2017

Albany Country Club, Voorheesville, NY

Members and Alternates

in Attendance:

Curt Dahl, P.E. PSEGLI – Member – Chair

Peter Altenburger National Grid, USA – Member – Vice Chair

George Loehr Unaffiliated Member

William H. Clagett Unaffiliated Member - Phone

Bruce Ellsworth Unaffiliated Member George Smith, P.E. Unaffiliated Member

Richard J. Bolbrock, P.E. Municipal & Electric Cooperative Sector – Member Matt Schwall Independent Power Producers of NY – Member

Rick Brophy
New York State Electric & Gas/RG&E –Alternate Member

Frank Pace Central Hudson Gas & Electric – Member
Mayer Sasson Consolidated Edison Co. of NY, Inc.- Member
Mike Mager Couch White (Large Customer Sector) – Member

Sunil Palla NYPA – Member

Other

Paul Gioia, Esq. Counsel

Carl Patka, Esq.

New York Independent System Operator (NYISO)
Rick Gonzales

New York Independent System Operator (NYISO)
Rana Mukerji

New York Independent System Operator (NYISO)
Emilie Nelson

New York Independent System Operator (NYISO)
New York Independent System Operator (NYISO)
New York Independent System Operator (NYISO)

Don Raymond Executive Secretary
Mariann Wilczek PSEGLI - ICS Chair

Tim Lundin NYPA

Roger Clayton Electric Power Resources, LLC – RRS/RCMS Chair

Al Adamson Treasurer, Consultant

Vijay Poulen NYS Department of Public Service

Visitors- (Open Session)

Philip Fedora Northeast Power Coordinating Council (NPCC)

Herb Schrayshuen Power Advisors, LLC

Scott Leuthauser HQ US Kelli Joseph NRG

"*" Denotes part-time

- **1.0 Introduction** Chairman Dahl called the NYSRC Executive Committee (Committee) Meeting No. 215 to order at 9:30 a.m. on March 10, 2017.
- **1.1 Meeting Attendees** All Members and/or Alternate Members (or representatives) of the NYSRC Executive Committee were in attendance.
- **1.2 Visitors** See Attendee List, page 1.
- 1.3 Requests for Additional Agenda Items None
- **1.4** Declarations of "Conflict of Interest" None
- **1.5 Executive Session Topic** An Executive Session was held to select a new Unaffiliated Member.
- 2.0 Meeting Minutes/Action Items
- **2.1 Approval of Minutes for Meeting No. 214 (February 10, 2017)** Mr. Raymond introduced the revised draft minutes of the February 10, 2017 Executive Committee meeting which included all comments received to date. There were no additional comments. Mr. Ellsworth moved for approval of the draft minutes. The motion was seconded by Mr. Smith and unanimously approved by the Executive Committee members (13 to 0). The Executive Secretary will post the minutes on the NYSRC website **AI #215-1.**
- **2.2 Action Items List** The Executive Committee reviewed the Outstanding Action Items list and accepted removal of the following items:

Action Item #	<u>Comments</u>
213-3	Response to the Auditor's request for member contributions was completed in February 2017.
213-4	Signed Acknowledgement Forms were completed in February 2017.
213-6	The IRM milestone schedule was reviewed during the February 10, 2017 Conference Call.
213-7	The 2017 Reliability Compliance Program was presented to the Executive Committee during its February 10, 2017 Conference Call.
213-8	The annual Delaware tax payment was made prior to February 15, 2017.

3.0 Organizational Issues

3.1 NYSRC Treasurer's Report

- **i.** Summary of Receipts & Disbursements Mr. Adamson introduced the Summary of Receipts and Disbursements which showed a surplus of \$201,000 at the end of February 2017. Mr. Adamson also noted that in February 2017 the last payment of \$5000 was received thereby completing the 2017 1st Quarter Call-For-Funds of \$165,000.
- ii. 2nd Quarter Call-for-Funds After review of the projected cash flow for the 2nd Quarter 2017, Mr. Adamson recommended a 2nd Quarter Call-for-Funds of \$25,000 per TO. Mr. Bolbrock moved for approval of the recommended 2nd Quarter Call-for-Funds. The motion was seconded by Mr. Smith and unanimously approved by the Executive Committee (13 to 0).
- **iii. 2016 Audit** Mr. Adamson noted that each February the Auditor, Slocum, DeAngelus & Associates, prepares IRS Form 990 for organizations exempt from income tax. Mr. Adamson has reviewed, provided comments, and sent the finalized 17 page Form to the IRS. No issues were raised during the preparation of the Form 990.

Mr. Adamson indicated that the 2016 Audit was very successful. He and Ms. Campoli provided the necessary accounting information, and the affiliated Executive Committee members provided their to payments to the NYSRC in 2016. The Audit Report includes the Independent Auditor's Report and Financial Statements. The Independent Auditor's Report states, "We believe that the audit's evidence we have attained is sufficient and appropriate to provide a basis for our audit opinions" and "In our opinion, the financial statements present fairly, in all material respects, the statement of cash receipts and disbursements for the years ending December 31, 2016 and 2015 in accordance with the cash basis of accounting".

3.2 Other Organizational Issues –

- i. Unaffiliated Position Search Discussion took place in Executive Session.
- **ii.** Code of Conduct Mr. Raymond reported that all signed Code of Conduct Acknowledgement Forms were received. He thanked all involved.
- iii. Membership Mr. Dahl reported that Mr. Altenburger has accepted a new position at NGrid beginning April 1, 2017. Mr. Altenburger will attempt to finish his Vice Chair term ending August 1, 2017. Mr. Bart Franey will serve as the Alternate NGrid member and become the NGrid Executive Committee member on August 1, 2017.

4.0 Installed Capacity Subcommittee (ICS) Status Report/Issue

- **4.1 ICS Chair Report** Ms. Wilczek reported that the ICS met on March 1, 2017. At her request, Mr. Gonzales (NYISO) reported that the Resource Adequacy Team that supports IRM analyses was transitioned to Ms. Emilie Nelson, VP of Market Operations within the NYISO. She is responsible for administering the Installed Capacity market. Josh Boles will be the manager in charge of the Resource Adequacy, including technical support to ICS. The transition is felt to better align responsibilities within the NYISO and improve communications between the NYISO and ICS.
 - Ms. Wilczek then focused attention to the following ICS Tasks:
 - i. Modeling of NYISO Locality Sales The NYISO reported that GE is continuing its work on the MARS modeling aspects of the Locality Sales. Also, the NYISO has scheduled an ICAP WG meeting on March 22, 2017 to discuss the issue with stakeholders. The NYISO is scheduled to provide a draft white paper at the April 2017 ICS meeting.
 - ii. Emergency Assistance Limits -
 - (a) Mr. Adams provided an update of his analysis of historical annual peak load alignment with the load forecast uncertainty (LFU) bins from 1999 to 2016. The actual occurrences per bin aligned closely with the expected occurrences. However, the alignment for the years 2013 through 2016 was less definitive due to the lack of data.
 - (b) Also, Mr. Adams provided an analysis of the highest 100 hours from 2013 through 2015. The results showed that the occurrences fell into bins 2 (50%), 3 (28%) and 4 (22%) and none in bin 1, 5, 6 and 7. He is requesting additional data from the NYISO to improve the distribution.
 - (c) At the request of ICS, the NYISO provided the distribution of loss-of-load events in the 2017 IRM preliminary base case. Also provided was the contribution per month by load level to the annual NYCA LOLE.
 - (d) Mr. Adams will continue to work on developing a range of Emergency Limits. The NYISO will test the limits using the MARS model to determine the impact on the IRM. He will provide a recommendation and draft white paper for discussion at the April 5, 2017 ICS meeting. The white paper and recommended limit will be presented to the Executive Committee for approval at its May 12, 2017 meeting AI #215-2.
 - Mr. Mager noted that while many ICS members feel that Emergency Assistance is overstated in the current MARS model, there is a lack of consensus on a methodology to resolve the issue.
 - iii. Review NYISO Alternative LCR Methodology The NYISO presented its 2017 work plan for meeting its commitment to propose an alternative method for determining LCRs based on

- optimizing economics while maintaining the Executive Committee's approved IRM. Mr. Mager emphasized that the methodology does not alter the IRM. Also, he suggested that a presentation to the Executive Committee should be made $-\mathbf{AI\#215-3}$.
- iv. Impact of a High Penetration of Renewable Resource on IRM Ms. Wilczek referred to the study scope prepared by Mr. Adamson. The sensitivity study will begin with the preliminary 2018-19 IRM Study base case. The IRMs will be determined for various levels of wind and solar capacity as summarized below:
 - (a) Renewable Scenario 1: No wind and solar (all wind and solar capacity removed from the preliminary 2018-19 base case).
 - (b) Renewable Scenario 2: Preliminary 2018-19 base case, including projected base case wind and grid connected solar capacity. (The 2017-18 IRM base case assumed 1,676 Mws of wind and 32Mws of grid connected solar.)
 - (c) Renewable Scenario 3: Add 2,000 Mws of wind capacity, above the preliminary base case level.
 - (d) Renewable Scenario 4: Add 2,000 Mws of grid connected solar capacity above the preliminary base case level.
 - (e) Renewable Scenario 5: Combine Scenarios 3 and 4 wind and solar capacity additions. The NYISO staff will provide recommendations as to the zonal distribution of wind and solar resource capacity additions in Scenarios 3 to 5. Scenarios 2 to 5 will utilize the tan 45 analysis in accordance with Policy 5 procedures.
 - Mr. Loehr moved for approval of the renewable resource sensitivity study. The motion was seconded by Mr. Smith and unanimously approved by the Executive Committee (13 to 0).
- v. 2018-19 IRM Study Assumption Matrix The NYISO highlighted a potential new parameter, "Behind the Meter Solar Resources". This would require a zonal forecast of hourly solar production. The ICS decided to keep the parameter as part of the load forecast as was done in the 2017-2018 IRM model assumptions. It will become a white paper topic for consideration in the 2019-2020 IRM process. The Assumptions Matrix is scheduled to be approved by the Executive Committee at its July 14, 2017 meeting AI #215-4.
- 5.0 Reliability Rules Subcommittee Status Report/Issues
- **5.1 RRS Status Report & Discussion Issues** Mr. Clayton reported that a joint RRS/RCMS meeting was held on March 2, 2017. Two separate meetings were held, each with its own agenda and minutes. He summarized RRS's current activities which are included in Sections 5.2 5.5 below.
- 5.2 Status of New/Revised Reliability Rules
 - i. Proposed NYSRC Reliability Rules Revision
 - **a.** List of Potential Reliability Rules ("PRR") Changes Mr. Clayton introduced the "List of Potential Reliability Rule Changes".

PRR #128, <u>Definition of Bulk Power System</u> is tabled pending the NPCC review of A-10 revisions. Mr. Smith, recent Chair of the NPCC TFCP, indicated that the NPCC review could take as long as two years. Since the current NYSRC A-10 differs from that of NPCC, Mr. Clayton indicated that RRS may request that the Executive Committee adopt the current NPCC A-10 with the understanding that a subsequent revision will be necessary when the new NPCC revised A-10 is available.

PRR #136, <u>I.4 (R1 & R2)</u>, <u>Clarification of the MP Screening Guidelines</u> will assure that the MPs are using the same screening guidelines as the NYISO for identifying suspect data as was intended by I.4. It was approved by the Executive Committee for "Posting for Comment" during its

February 10, 2017 Conference Call. No comments have been received. The due date is April 3, 2017.

PRR #137, <u>D.2 (R1) Underfrequency Load Shedding</u>, is a new PRR under development to bring the NYSRC Reliability Rules & Compliance Manual into conformity with NERC and NPCC Under frequency requirements.

5.3 Proposed NYSRC Reliability Rule Revisions

- a. Status of New/Modified Reliability Rules
 - 1. PRRs for EC Final Approval
 - None
 - 2. PRRs for EC Approval to Post
 - None
 - 3. PRRs for EC Discussion
 - None
- **NERC Standards Development** Mr. Adamson noted the NYSRC voted "Yes" on EOP-004-4, <u>Emergency Operations</u>; EOP-005-3 and EOP-6-3, <u>Emergency Operations</u> and CIP-003-7, <u>Modification to CIP-003-7</u>. The NYSRC voted "No" on the balloting of CIP-013-1, <u>Cyber Security Supply Chain Risk Management</u>. The "no" vote is consistent with the positions of NGrid and ConEd. NPCC abstained.

5.5 Other RRS Issues

- i. RRS 2016 Highlights Report The Introduction to the Report describes the responsibilities of RRS. The second section, "2016 Highlights", summarizes the nine new or revised NYSRC Reliability Rules recommended by RRS and approved by the Executive Committee in 2016. From 2005 through 2016, RRS has recommended approximately five new or revised Reliability Rules per year. The Report concludes that (a) the NYISO continued to provide valued assistance to RRS in 2016 and (b) RRS provides an active technical forum for discussion of NYS reliability matters. All parties including Transmission Owners, Developers, the Public and NYISO staff have a forum through RRS to develop new or revised Reliability Rules, and continue to do so in a collegial and cooperative manner.
- ii. RRS Status Report See Sections 5.2 and 5.4.

6.0 Reliability Compliance Monitoring Subcommittee (RCMS) Report/Issues

Mr. Clayton reported that RCMS met on March 2, 2017 following the RRS meeting to review the status of the 2017 New York Reliability Compliance Program.

- **6.1 2017 Reliability Compliance Program (NYRCP)** Mr. Clayton reported that the RCMS found the NYISO to be in full compliance with the following Requirement(s):
 - (i) B.2 (R1), 2016 NYCA Transmission Review, and
 - (ii) C.8 (R1), Real-time Operations of the NYS BPS.

7.0 Reliability Initiatives

7.1 Defensive Strategies – Mr. Smith reported that he and Mr. Loehr have completed their presentation material for the MDMS Project. The presentation will be given to the Executive Committee at its April 13, 2017 meeting – AI #215-5. Mr. Smith will be posting a CEII redacted version of the presentation on the NYISO's e-planning secured website. The final MDMS Report will also be posted on the secured NYISO website. Mr. Smith thanked the NYISO for its anticipated assistance in creating the public version of the Report.

8.0 State/NPCC/Federal Energy Activities

- 8.1 NPCC Board of Directors (BODs) Mr. Forte provided a summary of the NERC 2016 Long-Term Reliability Assessment (LTRA). The NERC Assessment provides a wide-area perspective of the generation, demand-side resources, and transmission system adequacy needed during the next decade. The 2016 LTRA found that (i) natural gas dependency, (ii) distributed energy resource (DER) challenges, and (iii) maintaining essential reliability services (ERSs) during a changing resource mix are among the most pressing emerging reliability issues facing Bulk Power System (BPS) reliability. Questions may be directed to Mr. Forte or Dr. Sasson.
- **8.2 NPCC Report** Mr. Fedora highlighted the following items from the March 1, 2017 NPCC RCC meeting:
 - (i) The 2017 Under-frequency Load Shedding Assessment study scope and schedule were approved. It is a two year program beginning in 2017 to review the under-frequency load shedding parameters and the impact of distributed resources on the settings.
 - (ii) The 2017 NPCC Summer Reliability Assessment preliminary results and approval schedule were presented. The approval schedule ends with a media event on May 4, 2017 when the results will be presented to the media and questions addressed.
 - (iii) A roster for the CP-11 WG was approved to review the NPCC A-10 Document. A scope of work was discussed and approved subsequent to the RCC meeting.
 - (iv) The NERC Distributed Energy Resources Connection Modeling and Reliability Considerations Report was presented. The Report was accepted by the NERC BOT at its February 9, 2017 meeting. The report calls on transmission and distribution entities to develop computer models projecting the real-time dispatch of distributed energy resources such as utility-scale renewables or aggregated resources, demand response, micro-grids and virtual power plants.
 - (v) Discussion of the NERC Supply Chain Cybersecurity Risk Management Standards. The 2017 Reliability Leadership Summit, hosted by NERC and the Reliability Issues Steering Committee (RISC), will be held on March 21, 2017, in Washington, DC. The Summit gathers more than 100 leaders of the reliability community, including top industry executives, state and federal regulators, and NERC and Regional Entity senior leadership. The Summit is a key milestone in the strategic planning processes of the ERO and the results and observations from the Summit will be used to identify, assess, and manage reliability priorities across the ERO Enterprise. This year, moderated panels of industry leaders will focus on discussing: (i) challenges in operating the BPS; (ii) resiliency and security; and (iii) emerging risks to reliability. Please note that attendance is limited and on a first-come, first-served basis. An agenda will be provided in advance of the Summit.

On Friday March 24th from 8:00am to 10:00am (Pacific Time) the IEEE LOLE WG will hold a 2-hour webinar on adequacy methodologies. The webinar will be hosted by the NW Power and Conservation Council. Dr. Daniel Burke (National Grid UK) will present the results of a survey National Grid completed last year asking planners to summarize their methods for assessing power supply adequacy. NPCC's Task Force on Coordination of Operation (TFCO) is currently reviewing the NPCC Regional Reliability Reference Directory No. 2 – Emergency Operations. One of the requirements in this Directory states – "Each Balancing Authority shall have the capability of manually shedding at least fifty percent of its area load in ten minutes or less". One of the questions raised was the origin of the "50%" requirement. In reviewing some of the documents/reports from Con Edison and other reports (Federal Power Commission's report on 1965 blackout), it appears that the "50%" precedes the 1977 blackout and dates back to the 1965 event. The TFCO is looking to identify/discover any document trail or history of the decision to implement this criterion NYPP-wide and NPCC-wide.

9.0 NYISO Status Report/Issues

9.1 Reliability Planning Process – The 2016 Comprehensive Reliability Plan (CRP) is the next phase of the Reliability Planning Process, following the 2016 RNA. The 2016 CRP first draft report and appendices

were presented at the February 23, 2017 ESPWG/TPAS. A second draft will be presented at the March 7th ESPWG. The NYISO plans to bring the CRP Report for review and action at the Operating Committee on March 16th, and at the Management Committee on March 29th. Given that there are no outstanding Reliability Needs, the NYISO did not solicit solutions under the 2016 CRP process. Therefore, the CRP report provides a summary of developments in the 2016 Reliability Planning Process (RPP), with no additional assessments performed.

- 9.2 CARIS The CARIS 2 base case is complete and no specific 2016 CARIS 2 project proposals were submitted as of January 31, 2017. The 2017 CARIS 1 process will begin in February 2017. PPL Electric Utilities has requested an additional CARIS study, assessing the economic impact of a new transmission facility connecting Lackawanna, PA and Ramapo, NY. This study is on-going. The NYISO staff is continuing its internal assessment of appropriate metric methodologies for estimating the capacity benefits of transmission projects as well as other potential metrics of project impact.
- 9.3 **Public Policy Transmission Planning Process** – On July 16, 2015, the PSC declared a Public Policy Transmission Need (PPTN) in Western New York. The NYISO issued a solicitation for solutions on November 1, 2015 and received 15 proposals by the December 31, 2015 due date. The NYISO performed the Viability and Sufficiency Assessment (VSA), and published the final report on May 31, 2016. The NYISO identified ten viable and sufficient projects and recommended certain non-bulk power transmission upgrades also be made to fulfill the objectives of the transmission need. On October 13, 2016, the PSC issued an Order confirming the WNY PPTN and directed the NYISO to proceed with the evaluation and selection of more efficient or cost-effective transmission solutions. On December 17, 2015, the NYPSC issued an Order identifying the AC transmission PPTN. The NYISO issued a solicitation for solutions on February 29, 2016, and received 16 projects by April 29, 2016. The NYISO performed VSAs, and published the final VSA report identifying 13 viable and sufficient projects on October 28, 2016. On January 24, 2017, the PSC issued an Order confirming the AC Transmission Need and adopted the refined cost allocation methodology submitted by the NYISO. Based on the Order, NYISO will: (i) ask developers to confirm their intent to proceed with their projects, (ii) commence the next phase of the Public Policy Process to evaluate and select the more efficient or cost effective transmission solution, and (iii) file the PSC's prescribed cost allocation methodology for the new transmission projects at the FERC for its consideration. On August 1, 2016, the NYISO initiated the 2016 Public Policy Transmission Planning Process (PPTPP) cycle by issuing a solicitation for proposed transmission needs driven by Public Policy Requirements. Twelve entities submitted proposals by September 30, 2016. The NYISO filed the proposals with the PSC on October 3, 2016, for its consideration. If the PSC determines that there is a need for transmission, the NYISO will solicit projects from developers to fulfill that need.

9.4 Interregional Transmission Studies

- i. IPSAC The Joint ISO/RTO Committee (JIPC) reviews on an ongoing basis interconnection projects that may have interregional impacts. Through 2017, the JIPC will also continue efforts to develop and improve procedures for interregional coordination.
 The JIPC is continuing to develop, coordinate, and maintain an interregional production cost database. An IPSAC Webex meeting was held on December 9, 2016 to discuss Regional planning needs and plans for each of the ISO/RTOs and Interconnection projects potentially affecting neighboring systems.
- **ii. EIPC Study** The Final 2015 EIPC Roll-up Report was completed in March 2016 and posted to the EIPC website: http://www.eipconline.com/non-doe-documents.html. The Production Cost Task Force (PCTF) is developing an Eastern Interconnect-Wide (EI-Wide) working production cost model that provides value to regional planning studies and EI-Wide studies.

9.5 Other Studies/Activities

i. NYISO Clean Power Plan Assessment - Mr. Peter Carney, Project Manager Environmental Studies

at the NYISO, gave a presentation titled, <u>Clean Power Plan (CPP) Assessment (Final Report)</u>. The objective of the Assessment was to better understand the interaction between various potential compliance approaches to meet RGGI and CPP environmental requirements and the existing Market Rules and System Reliability Criteria.

New York State (NYS) is currently one of the cleanest States (#6 in lbs/MWh) under RGGI and throughout the Nation. Currently NYS emissions are below the 2020 RGGI limit and the 2023 limit of the CPP. The RGGI 2016 Program will bring NYS in well below the CO₂ emissions limits (mmtons) of the CPP for NYS out to at least 2030. Therefore, the trading of allowances or rate credits outside of NYS and outside RGGI is a significant opportunity assuming an adequate trading mechanism within the nine RGGI States or nationwide.

The NYISO CPP Assessment builds on existing NYISO studies including the: (i) 2015 Solar Photovoltaic Study, (ii) 2015 CARIS and (iii) 2016 RNA. It focuses on NYS with minimal changes in neighboring ISO/RTOs. Five scenarios were developed which spanned potential futures. Production cost simulations were used to determine energy needs and emissions performance. The years studied were 2024 and 2030.

The CPP Assessment found that various combinations of renewable resources and gas fired peaking units can provide adequate energy while meeting the RGGI and CCP CO₂ emissions limits. However, NYS will need additional resources beyond those considered in the CPP Assessment to comply with the NYS resource adequacy criterion in 2030. Also, NYS's compliance will at certain times depend upon an adequate supply of allowances or rate credits emissions from other states. It was acknowledged that the CPP may not go into effect in its current form.

10.0 Market Initiatives Impacting Reliability – Mr. Mukerji (NYISO) discussed updates to market initiatives that are felt to have significance from a reliability perspective.

The NYISO has initiated stakeholder discussion on evaluating alternative <u>Methodologies for Setting Locational Capacity Requirements</u> (LCRs). There are multiple possible approaches to determine the requirement for a Capacity Zone after the IRM has been set under NYSRC's Policy 5. The NYISO recognizes that some methodologies may require modifications to the NYSRC's Policy 5 which must be approved by the NYSRC.

The NYISO continued discussions with stakeholders on alternative methods for determining Locational Minimum Installed Capacity Requirements (LCRs). This effort will look for ways to optimize LCRs based on minimizing capacity costs statewide while maintaining minimum Loss of Load Expectation criteria, and address any cost allocation rules to ensure that loads are paying their fair share of capacity costs. The NYISO is continuing analysis and discussions on the viability and stability of the process, and will discuss these with stakeholders and NYSRC's ICS committee.

Since the announcement of the NYS PSC REV initiative, there has been a growing interest in Energy Storage Resource Integration. Currently, the NYISO has several resource classifications that can accommodate participation of storage in the wholesale markets including: (1) Energy Limited Resource (ELR); (2) Limited Energy Storage Resource (LESR); and, (3) Demand Side Ancillary Services Program (DSASP). New storage resource characteristics may facilitate additional opportunities to participate in the markets. The NYISO initiated discussions in the Market Issue Working Groups to engage stakeholders in: (1) a review of resource characteristics, (2) existing market rules that define the opportunities for storage resources to participate in the markets, and (3) an evaluation of revisions that may be necessary to accommodate new storage resources. On November 17, 2016, FERC issued a Notice of Proposed Rulemaking (NOPR) that would require each RTO and ISO to revise its tariff to establish a participation model for storage resources in wholesale markets and define distributed energy resource aggregators as a type of market participant that can participate in organized wholesale markets.

The NYISO MMU has raised concerns with the capacity market pricing outcomes if resources located in import constrained localities sell their capacity to external control areas (<u>Capacity Exports from Localities</u>). Stakeholders approved an approach for reflecting Capacity Exports from Localities in the

2017/2018 Capacity Markets, encouraging ongoing analysis and development of market rules for enhancing the modeling treatment for future years. The NYISO has implemented the approved methodology to recognize that an exporting generator continues to operate within its Locality. The NYISO is continuing stakeholder discussions on a probabilistic method for setting the locality exchange factor. The NYISO will file with FERC in June 2017 either revised rules or a report on progress made to date.

To ensure NYISO markets are capable of integrating <u>Distributed Energy Resources</u> (DERs) in greater numbers and to provide clarity as to how they can realize value for their services, NYISO staff has engaged Market Participants in the development of a DER Roadmap. The roadmap seeks to build a 3-5 year plan for market enhancements that better integrate DERs into NYISO's markets. Opening New York's wholesale markets to DER will support the NYISO goals to improve market animation, increase system wide efficiency and improve system reliability and resiliency. The NYISO has released its Distributed Energy Resource Roadmap. Stakeholder discussions have commenced with an initial focus on aggregations and pilot projects. As specific programs are developed, NYISO will return to NYSRC to provide relevant updates.

11.0 Other Items

11.1 NYISO Monthly Operations Report - Mr. Gonzales provided the Monthly Operating Report. The monthly peak load occurred on Thursday, February 9, 2016 at 22,215Mws. The Operating Reserve requirement at the time was 1965Mws resulting in a minimum Operating Capacity requirement of 24,180Mws. There were no Major Emergencies during the month. The Major Emergency state was declared 3 times.

Alert states were declared on 12 occasions – 6 times for exceeding the Central East voltage contingency limit. There were no TLR Level 3s declared during the month for a total of zero hours. Reserve were activated 9 times, 4 of the pickups were for ACE. There were no NERC/NPCC Reportable DCS Events. Mr. Gonzales noted that on March 8, 2017 a wind storm in western New York resulted in the loss of over 200,000 distribution customers on the NGrid and NYSEG/RG&E systems. The wind speed was as high as 80mph in Rochester, NY. There were 21 tripout operations on the transmission system, 7 of which permanently locked out.

- 11.2 North American Energy Standards Board (NAESB) Mr. Ellsworth noted that NAESB met with NARUC in February 2017. Also, the Gas/Electric restructuring directive that FERC sent to NAESB is complete, and the details have been sent to FERC without a recommended approval by NAESB.
- 12.0 Visitors' Comments None
- 13.0 Meeting Schedule

Mtg.			
<u>No.</u>	Date	Location	<u>Time</u>
216	April 13, 2017	Albany Country Club, Voorheesville, NY.	9:30 A.M.
217	May 12, 2017	Albany Country Club, Voorheesville, NY.	9:30 A.M.

The Executive Committee Meeting #215 adjourned at 12:00 A.M.