

Revised Draft Minutes
New York State Reliability Council, L.L.C. (NYSRC)
Executive Committee
Meeting No. 209 – September 9, 2016
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
Bruce Ellsworth	Unaffiliated Member
George Smith, P.E.	Unaffiliated Member
Richard J. Bolbrock, P.E.	Municipal & Electric Cooperative Sector – Member
David Johnson	Independent Power Producers of NY. – Member
Ray Kinney	New York State Electric & Gas/RG&E – Member
Jim McCloskey	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 - Phone

Other

Paul Gioia, Esq.	Counsel
Chris Sharp, Esq.	New York Independent System Operator (NYISO)
Wes Yeomans	New York Independent System Operator (NYISO)*
Rana Mukerji	New York Independent System Operator (NYISO)
Dana Walters	New York Independent System Operator (NYISO)
Rich Dewey	New York Independent System Operator (NYISO)
Brian Hodgdon	New York Independent System Operator (NYISO) - Phone
Don Raymond	Executive Secretary
Bob Boyle	ICS Chair
Roger Clayton	Electric Power Resources, LLC – RSS/RCMS Chair
Al Adamson	Treasurer, Consultant
Tim Lundin	NYPA – Phone

Visitors- (Open Session)

Philip Fedora	Northeast Power Coordinating Council (NPCC)
Mariann Wilczek	PSEGLI
Kevin Jones, Esq.	Hunton & Williams for NYISO
Kelli Joseph	NRG
Mark Younger	Hudson Energy Economics, LLC

“*” Denotes part-time

- 1.0 Introduction** – Chairman Dahl called the NYSRC Executive Committee (Committee) Meeting No. 209 to order at 9:30 a.m. on September 9, 2016.
- 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** – Executive Sessions were held on Methods for Determining Installed Reserves and ConEd’s System Restoration Plan.

- 2.0 Meeting Minutes/Action Items**
- 2.1 Approval of Minutes for Meeting No. 208 (August 12, 2016)** – Mr. Raymond introduced the revised draft minutes of the August 12, 2016 Executive Committee meeting which included all comments received to date. There were no additional comments. Mr. Smith moved for approval of the draft minutes. The motion was seconded by Mr. Ellsworth and unanimously approved by the Executive Committee members – (13 to 0). The Executive Secretary will post the minutes on the NYSRC website – **AI #209-1.**
- 2.2 Action Items List** – The Executive Committee reviewed the Outstanding Action Items list and accepted removal of the following items:

<u>Action Item #</u>	<u>Comments</u>
206-3	The Code of Conduct forms for the Executive Committee and all Subcommittees were completed on September 7, 2016.
208-2	On August 24, 2016, Mr. Raymond confirmed the dates that the Albany Country Club could host the 2017 Executive Committee meetings.

- 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 shows a surplus of \$183,000 at the end of August 2016. Also, Mr. Adamson noted that the year-end variance from Budget is projected to be a surplus of \$138,000.
 - ii. Fourth Quarter Call-for-Funds** – Mr. Adamson recommended a fourth Quarter Call-for-Funds of \$20,000 per TO. If approved, the total assessment per TO for 2016 will be \$95,000. This is the lowest annual assessment for several years. Mr. Bolbrock moved for approval of the fourth Quarter Call-for-Funds. The motion was seconded by Dr. Sasson and unanimously approved by the Executive Committee – (13 to 0).
- 3.2 Other Issues**
 - i. 2017 Meeting Schedules** – Mr. Raymond introduced the NYSRC “2017 Meeting Schedules” for the Executive Committee and each of the Subcommittees. The Executive Committee Meetings will be held at the Albany Country Club for all months except January, February and July 2017 which will be held at the NYISO.
 - ii. Economics vs. Reliability for Determining Installed Reserve** - Held in Executive Session.

4.0 Capacity Subcommittee (ICS) Status Report/Issue

4.1 ICS Chair Report – Mr. Boyle reported that the ICS met on August 30, 2016. He focused the discussion on the topics below:

- (a) Parametric Study – Mr. Boyle indicated that the 2017 preliminary base case including Ginna and Fitzpatrick Nuclear Plants provides an IRM of 18.3%. This is a 0.9% increase over the 2016 IRM. The increase can largely be attributed to: (i) Updated PJM, IESO, NE and Quebec modeling (+0.5%), (ii) Updated generator EFORds (+0.4%), and (iii) New wind capacity (+0.4%). The largest parameter reducing the IRM is the updated load forecast (-0.2%).
- (b) Proposed Sensitivity Cases – Mr. Boyle presented the list of proposed sensitivity cases. He requested the addition of a sensitivity case to measure the impact of an ISONE reconfiguration auction beginning in March 2017. The auction would allow any unit that is capable of providing has sold capacity to sell into ISONE’s reconfiguration auction. ISONE has filed with FERC for the necessary tariff changes. The NYISO has filed to intervene and is requesting that FERC delay ISONE’s request to a later time period to allow neighboring ISOs to adjust to the changing market. Given the regulatory and modeling uncertainties that exist at this time, Mr. Loehr moved that the list of sensitivity cases be approved contingent upon the (a) addition of a line item for the potential ISONE market change and (b) footnoting in the IRM Report stating that the method of modeling the market change has not been fully vetted. The motion was seconded by Mr. Bolbrock and unanimously approved by the Executive Committee – (13 to 0). Mr. Mager requested that next year’s IRM Study (2018) include a sensitivity case reflecting the CES initiative. Mr. Younger suggested doing the CES case using the 2017 base case in the spring of 2017. The Executive Committee was amenable to either approach – **AI #209-2**.

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 September 1, 2016. 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, Definition of Bulk Power System. PRR 128 is tabled pending the NPCC review of A-10 revisions.

PRR #135, G.4(R2) System Restoration From Eligible Black Start Resources. ConEd is required by G.4(R2) to ~~do an initial study~~ conduct annual studies to identify the eligible black start resources unless it affirms ~~Thereafter, ConEd may affirm~~ that the system has not changed. ~~or that a~~ In such case a new study is not required. The PRR #135, is currently under review by RRS, will clarify ConEd compliance certification requirements for G.4(R2).

5.3 Proposed NYSRC Reliability Rule Revisions

a. Status of New/Modified Reliability Rules

1. PRRs for EC Final Approval

- PRR #132, I.4 Transmission Data is under consideration in order to clarify the definition of “erroneous data” used in determining potential Non-Compliance with the Reliability Rules by Market Participants. The PRR was posted for “Posting for Comment” on July 30, 2016 and the due date was August 15, 2016. No comments were received. Dr. Sasson moved for final approval of PRR #132. The motion was seconded by Mr. Claggett and unanimously approved by the Executive Committee – (13 to 0).

2. PRRs for EC Approval to Post

- PRR #131C, Dual Fuel Testing Requirements. The concern is the ability of LOGMOB units to switch over to liquid fuels when required by the LOGMOB Program. The PRR is limited to combined cycle units in NYC. It is proposed that the existing Rule be supplemented by the inclusion of new Requirements and Measures applicable to the NYISO, ConEd, Generator Owners and the NYISO designed to provide greater assurance that the LOGMOB units can successfully switch fuels. Dr. Sasson moved for the posting of PRR #131 for comment. Mr. Smith seconded the motion which was approved by the Executive Committee – (11 to 2).
- PRR #133, F Restoration Plan. RRS has reviewed the discrepancy between the NERC/NPCC definition of black start units and the NYSRC definition. If left unchanged, this discrepancy would result in the NYSRC black start rule being ~~less stringent than~~ **contradictory to** the corresponding NERC/NPCC Rules. The PRR will correct the discrepancy. Mr. Clagett moved for approval to “Post for Comment” PRR #133 contingent upon inclusion of an administrative correction. The motion was seconded by Mr. Ellsworth and approved by the Executive Committee – (12 to 1).
- PRR #134, I.5 Disturbance Recording. PRR #134 proposes to retire Reliability Rule I.5 since none of the Requirements of I.5 are more stringent or specific than the related NERC and NPCC Standards and Criteria. Following discussion, Mr. Ellsworth moved for approval of PRR #134. The motion was seconded by Mr. Altenburger and approved by the Executive Committee – (12 to 0, 1 abstention).

3. PRRs for EC Discussion – None

5.4 NERC Standards Development – The NYSRC voted “No” on IRO-002-5 and TOP-001-4. The latter ballot was defeated. Also, the NYSRC voted “No” on EOP-005-3 and “Yes” on EOP-006-3 and 008-2.

5.5 Other RRS Issues –

- i. **RRS Status Report** – See Section 5.3a.
- ii. **Bucket List** – Mr. Clayton noted that the list has been retired.

6.0 Reliability Compliance Monitoring Subcommittee (RCMS) Report/Issues

6.1 RCMS Status Report & Discussion Issues – Mr. Clayton reported that RCMS met on September 1, 2016 following the RRS meeting to review the status of the 2016 New York Reliability Compliance Program.

6.2 2016 New York Reliability Compliance Program (NYRCP) – RCMS found the NYISO to be in full compliance with the following Requirement(s):

- (a) C.8 (R1), Real Time Operations of the NYS BPS,
- (b) E.1 (R1-R7), Operating Reserve Adequacy,
- (c) F.1 (R2), TO System Restoration Plans, and
- (d) F.1 (R3), Black Start Provider Requirements.

7.0 Reliability Initiatives

7.1 Defensive Strategies – Mr. Smith reported that Phase 2 of the MDMS project was intended to demonstrate that local relays could be used as a way to verify the inputs from a central disturbance monitoring system. However, based on the testing, it does not appear that local “blinder based” out-of-step relays on all lines of an interface are going to “see” the same thing. Therefore, the simple “blinder based” out-of-step relays will not provide the level of security desired for the overall mitigation scheme. While further study in this area is suggested, it would require extensive use of system protection planning resources beyond the scope of the MDMS project.

The first draft of the final report is expected to be available for review by the NYSRC and NYISO on or before September 16, 2016 **AI #209-3**.

8.0 State/NPCC/Federal Energy Activities

8.1 NPCC Board of Directors (BODs) – Mr. Forte provided a summary of NPCC implementation of NERC’s “Compliance Guidance Policy” which is comprised of two types of Compliance Guidance documents: (a) Implementation Guidance and (b) Compliance Monitoring and Enforcement Program Practice Guides. Questions and/or comments should be directed to Dr. Sasson or Mr. Forte (ConEd).

8.2 NPCC Report – Mr. Fedora reported that the NPCC Reliability Coordinating Committee (RCC) met earlier in the week in Toronto, ON. The Committee approved the Winter 2016-17 Multi-Area Probabilistic Reliability Assessment for NPCC. The Assessment estimates the potential use of Emergency Operating Procedures for base case and severe case conditions. The Assessment will be published in December 2016 together with the corresponding CO-12 Working Group’s more deterministic assessment which will be approved at the December 2016 RCC meeting. Mr. Fedora indicated that the system for the winter period is robust with the exception of some extreme sensitivity cases, such as the unavailability of natural gas over a period of time for generation. The RCC approved two new NPCC Directory clarifications; one on reserves and the other on tie benefits. Also, the RCC approved the retirement of the Niagara SPS-Type1 and replacement of the Bruce SPS.

The NPCC General Meeting is scheduled for December 7, 2016 at the OMNI Hotel in Montreal, Quebec. The topics are: (a) Distributed Energy Resources, (b) Cyber and Physical Security Resilience, and (c) The Outlook for Gas in the winter 2016-17.

9.0 NYISO Status Report/Issues

9.1 Reliability Planning Process – A first draft of the 2016 Reliability Needs Assessment (RNA) with the preliminary results were discussed at the July 5, 2016 ESPWG meeting and reviewed scenario results were reviewed with ESPWG on July 26, 2016. The preliminary RNA results indicate that there are no resource adequacy needs for the 2017-2026 study period, but it has identified transmission security issues in western New York and Long Island beginning in 2017. The NYISO presented the final RNA at the August 25, 2016 ESPWG/TPAS meeting and will be seeking approval at the September 19, 2016 Operating Committee meeting.

9.2 CARIS – The CARIS 2 base case is completed and no specific 2016 CARIS 2 project proposals were submitted as of August 31, 2016. Empire Connector has requested an additional CARIS study to assess the economic impact of a new transmission facility connecting Marcy and New York City. The 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 solicitation for solutions was issued on November 1, 2015 and solutions were due on December 31, 2015. The NYISO reviewed 15 proposals received from eight developers and performed the viability and sufficiency assessment (VSA). The draft VSA was issued on April 29th, 2016, and the final report was published on May 31, 2016. The NYISO identified ten viable and sufficient projects and recommended certain non-bulk transmission upgrades also be made to fulfill the objectives of the transmission need identified by the PSC. On June 22, 2016 the PSC issued a SAPA notice seeking public comment on whether there continues to be a need for transmission in Western New York with comments due August 8, 2016. On December 17, 2015, the NYPSC issued an Order finding that there is a transmission need driven by Public Policy Requirements to increase transfer capability of the Central East and UPNY/SENY interfaces. The NYISO issued a solicitation for solutions on February 29, 2016 with project responses due April 29, 2016. The NYISO is reviewing the 16 proposals received from six developers, and is currently performing a VSA to determine the capability of the projects to satisfy the public policy

criteria. The NYISO expects to complete its assessment in September 2016.

On August 1, 2016, the NYISO initiated the 2016 PPTPP cycle by issuing a solicitation for proposed transmission needs driven by Public Policy Requirements. The proposed needs are due September 30, 2016.

9.4 NYISO Clean Power Plan Study – The objective of the NYISO CPP study will be to examine how New York’s compliance strategies interact with existing market rules and system reliability. The NYISO will examine changes in transmission and system resources and changes needed to meet program objectives while maintaining essential reliability services. A presentation was made to the ESPWG on July 5, 2016. PTI Siemens will be studying system stability under low load/high renewable cases. NERC Essential Reliability Services will also be reported.

9.5 Interregional Transmission Studies

i. EIPC Study – Phase I – 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>.

In Phase II, the Technical Committee suggested offering EISPC a webinar or series of presentations on recently completed regional studies in lieu of engaging in a scenario analysis on the 2025 cases. The NYISO offered the CPP Study and the Solar Integration Study. The SSMLFWG Chair will discuss with EISPC the list of studies and topics that could be presented.

ii. IPSAC – The Joint ISO/RTO Committee (JIPC) reviews on an ongoing basis interconnection projects that may have interregional impacts. Through 2016, the JIPC will continue efforts to develop and improve procedures for interregional coordination. Also, the JIPC is continuing to develop, coordinate and maintain an interregional production cost data base.

The next IPSAC webex meeting is scheduled for December 9, 2016.

9.6 Other Studies/Activities – None

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 Behind the Meter: Net Generation Model will clearly explain rules whereby generation whose primary purpose is to serve onsite load can sell its excess generation into the wholesale electric markets. The NYISO received stakeholder approval of the market design in December 2015 and has received FERC approval of the relevant tariff changes. The NYISO anticipates implementation of the software to facilitate participation in the 4th Quarter of 2016.

Distributed Energy Resources Roadmap - The NYISO has commenced discussions on the future of the current Demand Response programs in the context of the NY State REV initiative and the post Supreme Court ruling on FERC 745. The NYISO is soliciting stakeholder feedback at this point. A draft white paper on the DER Roadmap is expected in August 2016.

The Comprehensive Shortage tariff changes were implemented in November 2015. The Comprehensive Scarcity pricing tariff changes were implemented in June 2016. Improvements to fuel and performance incentives are aimed at creating additional incentives for ICAP suppliers to be available on critical operating days. The NYISO is recommending suspension of efforts on fuel constrained offers to evaluate the potential needs of energy storage and distributed energy resources. Further work would be prioritized and completed after developing a greater understanding of potential market needs.

The NYS Public Service Commission (PSC) initiated the “Proceeding on Reforming the Energy Vision (REV)” with the goal of aligning electric utility practices and the regulatory paradigm with technological advances in information management, power generation, and distribution. These changes include: (a) a new business model in which Distributed Energy Resources (DERs) become a primary tool in the planning and operation of electric systems. Utilities would be encouraged to invest in DERs that help to avoid or defer the need for more historically traditional distribution system investments and (b) the establishment of a Distributed System Platform Provider (DSPP) that actively manages and coordinates

DERs while providing a market in which customers are able to utilize DERs in response to dynamic system conditions. Such customers would provide, and be compensated for, any system benefits associated with their responses. The NYISO is supporting efforts by the Joint Utilities reviewing ISO-DSP interaction and coordination.

FERC directed the NYISO to develop and file a set of rules to designate resources for Reliability Must Run (RMR) service to ensure the continued reliable and efficient operation of the power system and the NYISO Markets. The structure and administration will require: (a) specifying the retirement notification obligations, (b) a process for evaluating alternative solutions, (c) definition of compensation and cost allocation provisions, and (d) expectations for participation in the capacity and energy markets. A proposed solution framework was developed by the NYISO and filed with FERC. In addition, the NYISO is exploring enhancements to its long-term planning process to support identification and development of solutions for potential generator retirements. FERC has given the NYISO further compliance obligations in its ruling on the RMR proposal. The NYISO is developing these further compliance requirements with input from the stakeholders with an expected filing date of September 19, 2016.

The NYISO has initiated stakeholder discussion on evaluating alternate Methodologies for Setting Locational Capacity Requirements (LCRs). There are multiple possible approaches to determine the LCR 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. 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 the maximum Loss of Load Expectation criteria, and addressing any cost allocation rules to ensure that loads are paying their fair share of capacity costs. NYISO has engaged GE to assist in developing a mechanism that will evaluate the opportunities to refine LCR based upon the costs of maintaining the capacity. The NYISO expects preliminary results from GE in September 2016, draft methodology in October 2016 and final findings in December 2016, and will discuss these with stakeholders and the NYSRC's ICS committee.

The Demand Curve Reset process has been initiated to perform a reassessment of the capacity market demand curve parameters to be effective beginning with the 2017 Summer Capability Period. The Analysis Group has been selected to perform the study and has facilitated discussions on potential peaking unit types, the gross cost of such units, and the potential energy and ancillary service revenues available to the different unit types and locations. The Analysis has issued its final report with recommendations on the demand curve parameters. The NYISO has issued its draft report with preliminary recommendations on the demand curve and will issue its final report by September 15, 2016.

Since the announcement of the NYS PSC REV initiative, there has been a growing interest in Wholesale Market Participation of Storage Resources. Currently, the NYISO has several resource classifications that can accommodate participation of storage in the wholesale markets that include: (1) Energy Limited Resource (ELR); (2) Limited Energy Storage Resource (LESR); and, (3) Demand Side Ancillary Services Program (DSASP). New storage resources characteristics may facilitate additional opportunities to participate in the markets. The NYISO is initiating discussions in the market 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.

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 (Capacity Exports from Localities). Currently, Roseton has been awarded a forward capacity market obligation for the 2018/2019 period. ISO-NE is pursuing changes that would accelerate opportunities for participation and would allow resources to participate in the 2017/2018 auctions. The NYISO has initiated discussions

with stakeholders on reviewing the underlying market concerns and the MMU's proposed solution. The NYISO will be continuing discussions with stakeholders to explore resolutions.

11.0 Other Items

11.1 NYISO Monthly Operations Report - Mr. Yeomans provided the Monthly Operating Report. The monthly peak load occurred on Thursday, August 11, 2016 at 32,076Mws. The Operating Reserve requirement at the time was 1965Mws resulting in a minimum Operating Capacity requirement of 34,041Mws. There were no Major Emergencies during the month.

Alert states were declared on 18 occasions – 9 times for emergency transfers. There were no TLR Level 3's declared during the month for a total of zero hours. Reserve activations occurred 13 times. No NERC/NPCC Reportable DCS Events occurred.

Mr. Yeomans added that he will give a presentation on the summer hot weather operating conditions at a later date.

11.3 North American Energy Standards Board (NAESB) – Nothing new to report.

12.0 Visitors' Comments – None

13.0 Meeting Schedule

Mtg.

<u>No.</u>	<u>Date</u>	<u>Location</u>	<u>Time</u>
210	October 14, 2016	Albany Country Club, Voorheesville, NY.	9:30 A.M.
211	November 10, 2016	Albany Country Club, Voorheesville, NY.	9:30 A.M.

The Executive Committee Meeting #209 adjourned at 12:30 P.M.