

Draft Minutes
New York State Reliability Council, L.L.C. (NYSRC)
Executive Committee
Meeting No. 203 – March 11, 2016
Albany Country Club, Voorheesville, NY

Members and Alternates

in Attendance:

Curt Dahl, P.E.	PSEGLI – Member – Chair
Peter Altenburger	National Grid, USA – Vice Chair
George Loehr	Unaffiliated Member
William H. Clagett	Unaffiliated Member - Phone
Bruce Ellsworth	Unaffiliated Member
George Smith	Unaffiliated Member
Richard J. Bolbrock, P.E	Municipal & Electric Cooperative Sector – Member
David Johnson	Independent Power Producers of NY. – Member
Scott Leuthauer	Independent Power Producers of NY. – Alternate
Frank Pace	Central Hudson Gas & Electric – Alternate Member
Mayer Sasson	Consolidated Edison Co. of NY, Inc.- Member New York
Mike Mager	Couch White (Large Customer Sector) - Member
Larry Hochberg	NYP&A – Alternate - Phone
Ray Kinney	New York State Electric & Gas/RG&E – Member

Other

Paul Gioia, Esq.	Counsel
Carl Patka, Esq.	New York Independent System Operator (NYISO)
Rana Mukerji	New York Independent System Operator (NYISO)
Henry Chao	New York Independent System Operator (NYISO)
Leka Gjonaj	NYS Department of Public Service
Don Raymond	Executive Secretary
Bob Boyle	ICS Chair
Roger Clayton	Electric Power Resources, LLC – RSS/RCMS Chair

Visitors- (Open Session)

Philip Fedora	Northeast Power Coordinating Council (NPCC)
Mariann Wilczek	PSEGLI
Mark Younger	Hudson Energy Economics, LLC
Herb Schrayshuen	Power Advisors, LLC – Phone*

“*” Denotes part-time

- 1.0 Introduction** – Chairman Dahl called the NYSRC Executive Committee (Committee) Meeting No. 203 to order at 9:30 a.m. on March 11, 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** – Cyber Security and the Major Disturbance Mitigation Project (MDMS) were discussed in Executive Session.

- 2.0 Meeting Minutes/Action Items**
- 2.1 Approval of Minutes for Meeting No. 202 (February 11, 2016)** – Mr. Raymond introduced the revised draft minutes of the February 11, 2016 Conference Call. There were no additional comments. Mr. Bolbrock moved for approval of the revised 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 #203-1.**
- 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>
200-7	The annual Delaware Tax payment was made in February 2016.
201-2	Mr. Gjonaj presented the scope of the DPS “State Resource Planning Planning Analysis” at the February 11, 2016 Executive Committee Meeting.
201-3	Mr. Boyle presented the 2017-18 IRM Study schedule and process milestones at the January 8, 2016 Executive Committee Meeting.

3.0 Organizational Issues

3.1 NYSRC Treasurer’s Report

- i. Summary of Receipts & Disbursements** - Mr. Raymond, substituting for Mr. Adamson (Treasurer), introduced the Summary of Receipts and Disbursements which shows a surplus of \$218,000 at the end of February 2016. The 1st Quarter 2016 Call-For-Funds is paid in full with the receipt of \$35,000 in February 2016. The Treasurer recommended a 2nd Quarter Call-For-Funds of \$25,000 per TO member due April 1, 2016. Mr. Bolbrock moved for approval of the recommendation. The motion was seconded by Mr. Smith and unanimously approved by the Executive Committee members – (13 to 0).
 Also, Mr. Raymond indicated that the Accountant and Treasurer had provided all the records and information requested by the 2015 auditor, Slocum, DeAngelus & Assoc, P.C, in mid February 2016. The auditor did not indicate any issues or concerns following its review. As a result the “Independent Auditor’s Report for 2015” was received in early March 2016. The opinion expressed in the Report is “...the financial statements referred to above present fairly, in all material respects, its support,

revenue and expenses for the years then ending in accordance with the cash basis of accounting...”. Mr. Raymond distributed copies of the Report to the Executive Committee members and Mr. Gioia. In addition, the auditor prepared the IRS Form 990, Return of Organization Exempt from Income Tax. The return will be filed in March 2016.

3.2 Other Organizational Issues - None

- i. **PSC IRM Proceeding** – Mr. Gioia reported that the PSC has adopted the NYSRC IRM for the period May 1, 2016 through April 30, 2017.

4.0 Capacity Subcommittee (ICS) Status Report/Issue

- 4.1 **ICS Chair Report** – Mr. Boyle reported that the ICS met on March 2, 2016 and focused on the scopes of eight studies for the 2017 IRM assessment. The studies are listed below:

- | | |
|--------------------------------|------------------------------|
| (1) Emergency Assistance Model | (5) Multiple Year Wind Shape |
| (2) Acceptable LOLE for PJM | (6) Special Sensitivity Case |
| (3) PJM Model (bubble models) | (7) Retirements |
| (4) SCR Model | |

All but the study scope of the Emergency Assistance Model are complete. This study evaluates the acceptable levels of emergency assistance recognizing operating conditions and is a prerequisite to the analysis of several of the other studies. Mr. Yeomans agreed to provide this scope by March 25, 2016 so that questions could be developed before consideration and approval to send to the Executive Committee at the March 29, 2016 ICS meeting. The analysis for each scope will be documented in separate White Papers. The due dates for the White Papers are on or before June 1, 2016.

Mr. Boyle introduced a Work Plan, “ICS Studies for the 2017 IRM Study”, which provides the description of each study and the status of its scope and White Paper. Mr. Boyle noted that if the results of a 4 vs. 5 bubble models for PJM are unsatisfactory, are being evaluated. Also, an acceptable LOLE for PJM is being investigated by Messrs. Adamson and Adams. as back-up.

In response to a question from Mr. Smith, Mr. Boyle reminded the Executive Committee that Policy 5 indicates that “a proposed major enhancement of a model is given a thorough review – requiring testing and preparation of a white paper – before it is accepted for use in the base case. If it is found that a proposed model enhancement cannot be developed in time for the next IRM study, its implementation may be delayed to the following year’s IRM study”. Therefore, the use of the above study results in this year’s IRM base case will depend upon the timely completion of the White Papers.

Dr. Sasson asked if there was discussion at ICS on the Emergency Assistance Model. Mr. Boyle responded that the NYISO indicated it was having difficulty in developing the scope because of the implications of how much emergency assistance the NYISO can count on receiving based the Market on available historical import data and its markets. Dr. Sasson suggested that it could be set as a policy matter as a percentage of in-state resources. Mr. Bolbrock expressed the view that ICS should proceed with the intention that the solution of the Emergency Assistance issue will not be delayed for a second year, this time by market concerns, and will be used in this year’s IRM base case. Mr. Mukerji stated that the study is a reliability study, not a market study.

After further discussion, Mr. Bolbrock moved for approval of the Work Plan. The motion was seconded by Mr. Loehr and unanimously approved by the Executive Committee – (13 to 0).

Also, Mr. Boyle reported that the NYISO is discussing with PJM and ISO-NE a possible Joint Operating Agreement (JOA) between the control areas to replace the long standing Memorandum of Understanding (MOU) between the parties. The JOA will address both Planning and Operations and become part of the NYISO Open Access Transmission Tariff (OATT) and/or Market Services Tariff (MST). It will provide valuable guidance in the modeling of the integrated electric system external to NYCA.

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 3, 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 – 5.8 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. He reminded the Executive Committee that PRRs #120, through #122, Revision to Tables B-1, B-2 and C-1, were “Posted for Comment”. No comments were received during the comment period ending February 28, 2016. Therefore, RRS recommends final approval by the Executive Committee. After discussion, Mr. Loehr moved for approval of PRRs #120 through #122. The motion was seconded by Mr. Smith and unanimously approved by the Executive Committee – (13 to 0).

PRR # 128, Definition of Bulk Power System. PRR 128 is tabled pending NPCC A-10 revisions. Consideration of A-10 is currently on the NPCC-RC TFCP agenda.

PRR #130, ETC Application, RRS is investigating inconsistencies between the NYSRC Rules and and NYISO procedures. A meeting was held with Mr. Yeomans and Ms. Markham (NYISO) to better understand the actions that are taken on the Market side to resolve ETC declarations.

PRR #131, Dual Fuel Testing Requirements. Mr. Clayton noted that PRR #131 will require testing of dual fuel units in New York State to demonstrate the ability to fuel switch.

PRR #132, I.4(R3) Transmission Data, is under consideration to clarify the definition of “erroneous data” used in determining potential Non-Compliance with the Reliability Rules.

5.3 Proposed NYSRC Reliability Rule Revisions

a. Status of New/Modified Reliability Rules

1. PRRs for EC Final Approval – See Section 5.2

2. PRRs for EC Approval to Post – None

3. PRRs for EC Discussion – None

5.4 Procedure for NYCA Transmission Reviews – Mr. Clayton summarized the proposed administrative Procedure which will enable the implementation of PRR #121 for NYCA Transmission Reviews. The Procedure will be incorporated into the NYSRC Reliability Rules & Compliance Manual. Following discussion, Dr. Sasson moved for approval of the Procedure. The motion was seconded by Mr. Ellsworth and unanimously approved by the Executive Committee – (13 to 0).

5.5 Introduction to Transmission Planning Rules – Mr. Clayton indicated that the only change to the Introduction is the removal of a redundant paragraph as a result of the adoption of PRRs #120, through #122, Revision to Tables B-1, B-2 and C-1. Dr. Sasson moved for approval of the proposed change to the Introduction of the Transmission Planning Rules. The motion was seconded by Mr. Bolbrock and unanimously approved by the Executive Committee – (13 to 0).

5.6 RRS 2015 Report – Mr. Clayton introduced and summarized the RRS 2015 Report. The Report concludes that: (a) The NYISO continued to provide valued assistance to RRS in 2015, (b) The reformatted Reliability Rules & Compliance Manual is a useful resource in promoting a clear understanding of rule and compliance requirements by the NYSRC and NYISO, and (c) RRS provides an active technical forum for discussion of reliability issues. The Report is provided to the Executive Committee for its information. The Executive Committee expressed its appreciation.

5.7 NPCC/NERC Standard Tracking

i. NERC Standards Development – Nothing new to report.

5.8 Other RRS Issues –

i. Exception to the Reliability Rules – Mr. Clayton indicated that NGrid has requested removal of Exception #4, Transformer Monitoring. RRS reviewed the request and recommends Executive Committee approval. After discussion, Mr. Altenburger moved for approval of the request to rescind Exception #4. The motion was seconded by Mr. Bolbrock and unanimously approved by the

Executive Committee – (13 to 0).

ii **Rule on Dual Fuel Generation** – See Section 5.2i.a. (PRR #131).

iii. **Reforming the Electric Vision (REV)** – Mr. Clayton noted that at the last NPCC-RCC meeting there was a presentation describing an effort by ISO-NE to investigate the impact of Solar DG on the electric system. Mr. Chao indicated that the NYISO is wrapping up its Solar study on the impact of up to 3000Mws of various Solar resources on NYISO Operations.

6.0 Reliability Compliance Monitoring Subcommittee (RCMS) Report/Issues

6.1 RCMS Status Report & Discussion Issues – Mr. Clayton reported that RCMS met on March 3, 2016 following the RRS meeting.

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

- (a) A.1 (R1, R2) IRM Study and Report, and
- (b) C.8 (R1) Real-time Operations of the NYS BPS.

Regarding Requirement G.4 (R2), ConEd identification of Eligible Black Start Resources, ConEd performed a study to identify eligible black start resources. The study was found to be in full compliance. However, not all of the identified black start resources have completed installation of the necessary equipment to provide black start capability. Therefore, the compliance review was delayed pending NYISO notification that the required physical equipment has been installed.

RCMS was notified last month that there was a loss of control room communications. The NYISO provided a written report within the 30 day requirement. The report was reviewed by RCMS and found to be in full compliance with Rule H.1 (R4).

Mr. Clayton reported that four events had occurred in February and March 2016 requiring mitigation of Major Emergencies under Reliability Rule B.1. All the events involved high voltage loading of the Central-East interface above its voltage transfer limit. The NYISO met all reporting requirements. RCMS is following the situation.

6.3 2015 Reliability Compliance Highlights Report – Mr. Clayton introduced the annual Reliability Compliance Report for Executive Committee acceptance. The Report provides the Executive Committee and others with the highlights of the 2015 NYRCP. Included is discussion of: (a) the use of the newly reformatted Reliability Rules in the review of 40 Requirements, (b) the identification of eligible black start resources, (c) the identification of the ETC issues, (d) the Transmission Adequacy Assessments, and (e) the monitoring of NYISO compliance with the NPCC and NERC Requirements. The Executive Committee accepted the Report and noted its appreciation to RCMS.

7.0 Reliability Initiatives

7.1 Defensive Strategies – Discussion was held in Executive Session.

7.2 Cyber Security – Discussion was held in Executive Session.

8.0 State/NPCC/Federal Energy Activities

8.1 NPCC Board of Directors (BODs) – Mr. Forte provided a summary of the recent NPCC BOD's Policy input to NERC. The input focuses on three issues of particular interest to the NERC Board of Trustees: (a) the development of the 2017 Business Plan and Budget, (b) the redesign of the Electric Reliability Organization Enterprise's Strategic Planning, and (c) the cost effectiveness method and pilot proposal. Comments and/or questions should be directed to Dr. Sasson or Mr. Forte (ConEd).

8.2 NPCC Report – Mr. Fedora reported that the NPCC-RCC met on March 2, 2016 and approved the NPCC Tie Benefits Study. Also, two informational presentations were made: (a) the outlook for the summer 2016 from the preliminary results of the NPCC Deterministic and Multi-area Probabilistic Assessments. The Assessments are currently being updated and will be released toward the end of April

2016, and (b) preliminary results of the impact of distributed energy resources on the studies performed for the Overall Transmission Reliability Assessment approved in December 2015. The TFSS is reviewing the results and a report will be provided to the RCC for review and approval by the end of the March 2016.

9.0 NYISO Status Report/Issues

9.1 Reliability Planning Process - The 2014 CRP determined that the NY BPS will meet all applicable reliability criteria over the 2015 through 2024 study period, and confirmed that the initially identified Reliability Needs in the 2014 RNA are resolved. The final report was approved by the Board of Directors in July 2015.

Entergy Nuclear Power Marketing LLC notified the PSC and the NYISO on Nov. 13, 2015 of its intent to retire the James A. FitzPatrick Nuclear Generating Facility at the end of its current fuel cycle, which is projected to be approximately 4th Quarter 2016 – 1st Quarter 2017. In accordance with the new RMR process, the NYISO issued a Generator Deactivation Assessment on February 11, 2016 identifying a statewide resource deficiency beginning in 2019. The NYISO issued a solicitation for Gap Solutions on February 16, 2016 with responses due March 17, 2016. On March 2, 2016 the Market Participants (MP) were informed that the due date had been extended in order for the NYISO to take into consideration the new “Gold Book” data expected on April 29, 2016. If a deficiency is confirmed using the new data, the NYISO will update the solicitation and ~~provide a new due date for responses~~ request proposed Gap Solutions due by May 31, 2016. Otherwise, the solicitation will be withdrawn. The long-term permanent solution will be addressed through the 2016 RNA and CRP.

9.2 CARIS – The NYISO has begun the process to extend and update the CARIS 1 database for potential specific project submittals.

No specific 2016 CARIS 2 project proposals were submitted as of February 26, 2016. NYPA has requested an additional CARIS study be performed to assess the economic impact of various infrastructure upgrades in the NYCA transmission system. Also, Empire Connector has requested an additional CARIS study assessing the economic impact of a new transmission facility connecting Marcy and New York City.

The NYISO staff is continuing its internal assessment of appropriate metric methodologies for estimating the capacity benefits of transmission projects.

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, 2016 and solutions were due on December 31, 2015. The NYISO is reviewing 15 proposals received from eight developers and commencing the viability and sufficiency assessment. 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 will issue a solicitation for solutions by the end of February 29, 2016.

9.4 Interregional Transmission Studies

i. EIPC Study – EIPC members have created roll-up integration for summer and winter peak power flow cases of the Eastern Interconnection representing the year 2025. Gap analysis and linear transfer analysis were performed and compiled in a draft Roll-up Model Report in December 2015. The NYISO held an IPTF meeting on November 10, 2015 and EIPC held a webinar on November 17, 2015 to present the results and seek stakeholder feedback on potential scenarios of interest for analysis in 2016. Stakeholder written input on the draft Roll-up Report and possible scenarios was due January 29, 2016. EIPC is currently reviewing the responses.

ii. IPSAC – An IPSAC meeting was held on December 14, 2015 to discuss: (a) Regional Planning Needs for each ISO/RTO, (b) Interregional planning timelines in the context of Order 1000, and (c) Projects potentially affecting Neighboring Systems. The NYISO, PJM, and ISO-NE are drafting the 2015 Northeast Coordinated System Plan, in accordance with the Amended Northeast Planning Protocol under Order 1000. The draft is scheduled to be issued in March, 2016.

9.5 Other Studies/Activities – None

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

The Behind the Meter: Net Generation Model will clearly define rules to allow incremental generation behind the meter to participate in the NY Wholesale Electricity market. The NYISO received stakeholder approval of the market design in December 2015 and will file the relevant tariff with FERC shortly. The NYISO will also engage with stakeholders on further enhancements to integrate distributed resources into wholesale markets in 2016.

The Comprehensive Shortage tariff changes were implemented in November 2015. The NYISO has engaged stakeholders in a review of market design improvements to enhance the Scarcity Pricing mechanisms. The NYISO received stakeholder approval of the changes in October 2015 and is targeting implementation of the new practice in the 2nd Quarter of 2016.

Also, the NYISO is reviewing various options for recognizing fuel-constraints through additional bidding features to evaluate interest in further developing the concept. Incorporating the fuel limitations directly in the scheduling software will allow for more efficient use of the resources to meet reliability needs.

The NYISO is actively participating in the PSC's proceeding, Reforming the Electric Vision, directly supporting market working groups formed under Track One to facilitate conceptual discussions of REV design, system architecture, and potential interactions between retail activities and the wholesale markets. The NYISO is also looking to partner in various REV demonstration projects to evaluate the potential for operational and market impacts from DER participation.

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. In addition, the NYISO is exploring enhancements to its long-term planning process to support identification and development of solutions for potential generator retirements. The NYISO has developed and filed with FERC a proposed solution framework but has not yet received approval for the new provisions.

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 is facilitating a discussion in an ICAP Working Group Task Force to identify appropriate methodologies. The NYISO continued discussions with stakeholders on alternate 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 IRM set by the NYSRC and the LOLE criteria, addressing any cost allocation rules to ensure that loads are paying their fair share of capacity costs.

The Analysis Group is leading the Demand Curve reset evaluation and has had several discussions with stakeholders on the framework of the current DCR process, an evaluation of the periodicity of the DCR and a process for updating the net energy and ancillary services revenue offsets. Also, it has begun conversation on potential CONE unit types and typical costs. Any tariff revisions for a change in the periodicity of the DCR process will be filed with FERC in March 2016. The DCR process will continue through 2016 with a filing of the revised parameters in November 2016.

On January 25, 2016, DPS Staff issued a whitepaper outlining its recommendations to the Public Service Commission for implementing the state's Clean Energy Standard (CES). The CES is intended to increase the amount of renewable energy generation in New York State to 50% of total generation by 2030 while retaining upstate nuclear power plants in support of the state's carbon dioxide emissions

reduction goals. The NYISO is participating in the DPS stakeholder discussions and preparing comments on the white papers.

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). The NYISO is initiating discussions in the market working groups to engage stakeholders in a review of resource characteristics, existing market rules that define the opportunities for storage resources to participate in the markets and an evaluation of revisions that may be necessary to accommodate new storage resources.

11.0 Other Items

11.1 North American Energy Standards Board (NAESB) – Mr. Ellsworth reported that the NAESB Quarterly Bulletin is available. The next NAESB Board meeting is April 7, 2016.

12.0 Visitors' Comments – None

13.0 Meeting Schedule

<u>Mtg. No.</u>	<u>Date</u>	<u>Location</u>	<u>Time</u>
204	Apr. 8, 2016	Albany Country Club, Guilderland, NY.	9:30 A.M.
205	May13, 2016	Albany Country Club, Guilderland, NY.	9:30 A.M.

The Executive Committee Meeting #203 adjourned at 2:30 P.M.