

Revised Draft Minutes
New York State Reliability Council, L.L.C. (NYSRC)
Executive Committee
Meeting No. 198 – October 8, 2015
Albany Country Club, Voorheesville, NY

Members and Alternates

in Attendance:

Curt Dahl, P.E.	PSEGLI – Member – Chair
Syed Ahmed	National Grid, USA – Alternate
George Loehr	Unaffiliated Member
William H. Clagett	Unaffiliated Member
George Smith, P.E	Unaffiliated Member
Bruce Ellsworth	Unaffiliated Member - Phone
Richard J. Bolbrock, P.E.	Municipal & Electric Cooperative Sector – Member
Chris Wentlent	Independent Power Producers of NY. – Alternate - Phone
Scott Leuthauser	Independent Power Producers of NY. – Alternate Member
Chris LaRoe	Independent Power Producers of NY. – Alternate Member
David Johnson	Independent Power Producers of NY. – Member
Frank Pace	Central Hudson Gas & Electric – Alternate Member
Mayer Sasson	Consolidated Edison Co. of NY, Inc.- Member
Rich Brophy	New York State Electric & Gas/RG&E – Representative
Mike Mager	Couch White (Large Customer Sector) – Member

Other

Paul Gioia, Esq.	Counsel
Chris Sharp, Esq.	New York Independent System Operator (NYISO)
Henry Chao	New York Independent System Operator (NYISO)
Howard Tarler	New York Independent System Operator (NYISO)
Wes Yeomans	New York Independent System Operator (NYISO)
Rana Mukerji	New York Independent System Operator (NYISO)
Ed Schrom	NYS Department of Public Service
Don Raymond	Executive Secretary
Al Adamson	Treasurer, Consultant
Roger Clayton	Electric Power Resources, LLC – RRS/RCMS Chair
Erin Hogan	NYDOT – ICS Chair

Visitors- (Open Session)

Phil Fedora	NPCC
Kelli Joseph	NRG
Mark Younger	Hudson Energy Economics, LLC

“*” Denotes part-time

I. Open Session

1.0 Introduction – Chairman Dahl called the NYSRC Executive Committee (Committee) Meeting No.198 to order at 9:30 a.m. on October 8, 2015.

1.1 Meeting Attendees – All Members and/or Alternate Members (or representatives) of the NYSRC Executive Committee were in attendance with the exception of the New York Power Authority.

1.2 Visitors – See Attendee List, page 1.

1.3 Requests for Additional Agenda Items – None

1.4 Declarations of “Conflict of Interest” – Mr. Clayton informed the Executive Committee that he is working with Ambarc, a merchant transmission company, investigating potential sites for Micro Grids in New York. He will recuse himself from participation in any matter(s) that may be viewed as a “Conflict of Interest”.

1.5 Executive Session Topics – None

2.0 Meeting Minutes/Action Items

2.1 Approval of Minutes for Meeting No. 197 (September 11, 2015) – Mr. Raymond introduced the revised draft minutes which included all comments received to date. Mr. Clayton provided an additional comment. Mr. Clagett moved for approval of the draft minutes including Mr. Clayton’s comment. The motion was seconded by Mr. Bolbrock and unanimously approved by the Executive Committee members in attendance – (12 to 0). The Executive Secretary will post the minutes on the NYSRC website – **AI #198-1**.

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>
190-13	The filing with the NYS Attorney General was made in October 2015.
196-4	Mr. Yeomans indicated that the NYISO is investigating the issue.
196-6	A copy of the RR&CM Manual was sent to the PSC in September 2015.

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 balance of \$159,000 at the end of September 2015. He noted that the 4th Quarter Call-for-Funds is fully paid-up and that the electronic payment method is working very well. Mr. Adamson added that the year-end budget variation is projected to be \$91,000 under budget when including the \$50,000 contingency.

3.2 Other Organizational Issues

i. **Retention of Meeting Material** – Mr. Adamson reminded the Executive Committee that he was asked to prepare an estimate of the cost to retain “Meeting Materials” back to 2005 on the website. With input from Ms. Lynch and Ms. Garzone, it was determined that to convert about 400 sets of meeting materials for the Executive Committee and the Subcommittees beginning in 2005 to “html” format will cost \$2,000 - \$4,000. Ms. Garzone would train Ms. Lynch to perform the conversion to the website. Completion is expected by February 2016 – **AI #195-2**.

Mr. Smith moved to proceed with the conversion. The motion was seconded by Dr. Sasson and unanimously approved by the Executive Committee members in attendance – (12 to 0).

ii. **2015 Financial Audit** – Mr. Adamson indicated that he approached the NYSRC auditor, Slocum, DeAngelus & Associates for a proposal to perform the 2015 audit. The scope of work is the same as past years and the cost will be \$3,310 which is an increase of \$85.00. Mr. Claggett moved for approval of Slocum, DeAngelus & Associates to perform the 2015 NYSRC audit. The motion was seconded by Mr. Smith and unanimously approved by the Executive Committee members in attendance – (12 to 0).

4.0 Capacity Subcommittee (ICS) Status Report/Issue

4.1 **ICS Chair Report** – Ms. Hogan reminded the Executive Committee that at the last Executive Committee meeting, ICS was unable to provide the results of the Parametric Analysis because of significant changes caused by the updated 2014 wind shape and the updated PJM representation. The unexpected changes warranted additional review to understand the causes. During September 2015 additional analyses were done using the 2016 IRM preliminary base case showing that the updated wind shape lowers the reserve margin by 1.82% relative to 2013. This compares to the 0.2% difference in reserve margin between the 2012 and 2013 wind shapes. This raised the concern of many and resulted in the Executive Committee holding an email vote in September 2015 which authorized ICS to modify the approved preliminary base case to use the 2013 wind shape for conducting the sensitivities. Mr. Loehr moved for formal adoption of the use of the 2013 wind shape. The motion was seconded by Dr. Sasson and unanimously approved by the Executive Committee members in attendance – (12 to 0). Ms. Hogan noted that the updated PJM representation lowered the reserve margin by 3.85%. Consequently, before recommending a final 2016 base case, ICS will perform additional sensitivity cases to evaluate the impact of PJM emergency assistance. Also, a new multi year wind shape model will be tested – **AI #198-2**.

ICS held a conference call on October 7, 2015 to review the results of the sensitivities that have been completed. During the call the NYISO reported the following issues: (a) Con Ed and PJM have a contractual wheeling agreement which calls for the balancing of outflow from PJM on one path with inflows to ConEd on another path, (b) The NYISO is investigating whether there are differences between any Operations vs. Planning transfer limits, and (c) In late September 2015, the NYISO found that some PJM transmission projects in the preliminary base case were delayed. Additionally, there may be New York State transmission projects subject to delay.

Given this input, ICS is not requesting approval of the final base case assumptions at this time. Instead, it will meet on October 22, 2015 to review the NYISO’s results regarding the above issues and to approve the final base case assumptions. It was agreed that the Executive Committee will hold a conference call or email vote to approve the final base case assumptions by October 23, 2015 so that the Tan 45 analysis for the final base case can be completed before the ICS meeting on October 27, 2015. During November 2015, the sensitivity analysis will hopefully be completed.

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 October 1, 2015. 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”) Change** – Mr. Clayton introduced the List of Potential Reliability Rule Changes. He noted PRRs #120, through #122, Revision to Tables B-1, B-2 and C-1 were tabled pending NPCC Directory 1 approval. Since Directory 1 was approved on October 1, 2015, RRS will proceed to incorporate the NPCC Directory 1 Operating and Planning Tables specifying contingency events and performance requirements into PRRs #120 through #122 supplemented with the NYSRC more stringent performance requirements. Mr. Clayton reminded the Executive Committee that for PRR #128, Definition of NYS Bulk Power System, RRS was planning on using the NPCC A-10 with consideration of a ConEd radial exclusion proposal. This approach was tabled pending NPCC resolution of the radial exclusion issue. The issue is on the agenda of both NPCC TFSS and TFPC in November 2015. ConEd is active on both Task Forces.

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

5.4 NPCC/NERC Standard Tracking

- i. **NERC Standards Development** – Mr. Adamson introduced the NERC Reliability Standard Development Tracking Summary and noted that the NYSRC voted “No” on PRC -0276-1, System Protection Coordination.

5.5 Other RRS Issues –

- i. **Proposed New NYC Local Rule on Gas Generation** – Messrs. Clayton and Yeomans noted that the NYISO will pursue with the generator owners generator trips by multiple units but with the same engine type as was experienced in the 1st Quarter of 2015. ConEd will participate in the meetings.
- ii. **Bucket List** – Mr. Clayton introduced a table, “Candidates for Change to NYSRC RR&CM Manual”, and identified several items which RRS will work on:
1. Review NYISO’s EO Manual for consistency with Reliability Rules,
 2. Consider new Operating State definitions,
 3. Revise Reliability Rules to explicitly include additional Market Participant Requirements as appropriate,
 4. Consider adding to C.1 Requirements or Policy 1 procedures that would allow expedited approval of exceptions when the proposed revisions are minor, and
 5. Consider including Planning B.1 to Operating Rule E.1 (last column of Exceptions List).
- iii. **Reforming the Electric Vision (REV)** – Mr. Clayton indicated that Mr. Gioia has requested of Diane Barney (PSC) the name of a PSC representative to discuss the reliability implications of REV with RRS and the Executive Committee. Mr. Schrom will be following up for Ms. Barney who is retiring shortly.

6.0 Reliability Compliance Monitoring Subcommittee (RCMS) Report/Issues

6.1 **RCMS Status Report & Discussion Issues** – Mr. Clayton reported that RCMS met on September 3, 2015 following the RRS meeting.

6.2 **2014 New York Reliability Compliance Program (NYRCP)** – RCMS found the NYISO to be in full compliance with the following Measurement(s):

(a) C.5 (R2), Certify that Equipment Owners implemented required actions concerning NYISO fault current assessments, and

(b) C.8(R1.1 to R.1.8), Real-time operations of the NYS BPS.

Mr. Adamson is investigating a new method for selecting the following year’s Requirements that

will maintain an approximate equal number of assessments each year. He will present a three year plan to RCMS in December 2015.

6.3 Other RCMS Issues

i. Non-compliance Letter – Mr. Clayton reported that in accordance with Policy 4, RCMS is continuing to prepare a draft report of its preliminary finding of NYISO non-compliance. This finding is a result of a Market Participant non-compliance finding by the NYISO. It is expected to be presented to the Executive Committee at its November 6, 2015 meeting – **AI #197-4**. He noted the following items as complicating the discussion:

1. The impossibility of perfect accuracy of transmission and generation data submittals by Market Participants,
2. While requiring correction, most data errors do not adversely affect reliability causing judgments to be made regarding “materiality”,
3. Recognition of NYISO’s and Market Participants data checking procedures,
4. Recognition of mitigation steps already taken, and
5. Recognition of the opportunity to clarify Reliability Rule I.4 and related NYISO procedures.

Dr. Sasson pointed out that in many cases errors occur during the updating of a data base. Mr. Gioia reminded the Executive Committee that the applicable Reliability Rule requires that the data be “accurate”. Dr. Sasson indicated a concern due to not having a precise definition on what “accurate” means when absolute accuracy is not achievable. Unless this is addressed, any data correction, no matter how small, could be subject to a potential non-compliance finding. Mr. Clayton reported that the NYISO indicated that they would use their discretion on issuing additional non-compliance letters on data errors while this discussion and actions are completed and will additionally consult with the NYSRC before one is issued. Mr. Sharp confirmed this NYISO position to the Executive Committee.

7.0 Reliability Initiatives

7.1 Defensive Strategies – Mr. Smith indicated that a meeting was held on October 7, 2015 with EnerNex and included Messrs. Smith, Loehr, Chao and the EnerNex technical project manager. It was decided to proceed with the Kalman algorithm and the prediction method to detect instability. The cases to be studied were reviewed. The Black Out Replication case was dropped due to its complexity and the incompatibility between various levels of stability programs. Messrs. Smith and Loehr are not concerned since the Black Out was a slowly evolving event. The focus is on catastrophic events that are rapidly approaching extreme disturbances within or external to the New York system. The case to replicate voltage collapse in the PJM system was also eliminated. However, the Phase 2, loss of 2000Mws case was retained. The protection aspects of the Hybrid scheme were discussed in detail.

From a scheduling perspective, EnerNex (through its technical project manager) was informed of the intention to have the remaining cases completed and the view that it may take until March or April 2016. Mr. Smith sent an email to Mr. Razanousky (NYSERDA) informing him of the desire to complete the study with an extended completion date to ensure adequate time to obtain quality results and review the cases. Mr. Razanousky concurred. The working group is currently waiting for a response from EnerNex. Ms. Hogan strongly suggested contacting Mr. Razanousky should additional funding be required.

8.0 State/NPCC/Federal Energy Activities

8.1 NPCC Board of Directors (BODs) – Mr. Forte provided a summary of NERC’s draft “Compliance Guidance Policy” paper. It was posted for comment on September 17, 2015. The paper proposes to establish a policy to assist with standards implementation and provide direction to Electric Reliability Organization (ERO) enterprise Compliance Monitoring and Enforcement Program (CMEP) staff. Comments and/or questions should be directed to Dr. Sasson or Mr. Forte.

8.2 NPCC Report – Mr. Fedora reported that NPCC is in the midst of completing a number of Reliability Assessments which will be offered for approval at the December 2015 NPCC-RCC meeting. They include: (a) The Winter 2015 Assessment done by the CO-1 working group, (b) The CP-8 probabilistic Assessment of the Long Term Adequacy Overview and the Tie Benefits study, and (c) the NPCC- TFSS and SS-38 Overall Transmission Reliability Assessment and their investigation of load modeling.

At the NERC Reliability Assessment Subcommittee meeting on October 6&7, 2015, the finalization of the FRCC Overall Winter Reliability Assessment was discussed as well as their Long Term Reliability Assessment. Mr. Fedora emphasized the importance of starting from a common data base and then making the changes that the Region feels are appropriate. The NYISO Assessments are due to NPCC in December 2015.

9.0 NYISO Status Report/Issues

9.1 CARIS – Based upon the analysis of historic and projected congestion patterns, the NYISO staff has finalized the three studies for the 2015 CARIS (Central East, Central East-New Scotland-Pleasant Valley and the Western New York 230kV system) and reviewed the studies with stakeholders. Preliminary study results, including estimated production cost benefits and implementation costs for each study and generic solutions were provided to ESPWG on August 27, 2015. The NYISO presented drafts of its Report at the September 17 and 24, 2015 ESPWG meetings with further discussion at the October 1, 2015 joint TPAS/ESWPG meeting. The Report will go to the BIC on October 14, 2015 and the MC on October 28, 2015.

No specific 2014 CARIS 2 project proposals were submitted as of September 30, 2015.

NYPA has requested an additional CARIS study be performed to assess the economic impact of various infrastructure upgrades in the NYCA transmission system. The NYISO staff is continuing its internal assessment of appropriate metric methodologies for estimating the capacity benefits of transmission projects.

9.2 Public Policy Transmission Planning Process – On July 2015, the PSC declared a Public Policy Transmission Need in Western New York. In August 2015, NYISO staff presented to stakeholders the baseline technical details and next steps. To consider the potential impacts from system modifications that may arise in response to the notice of intent to retire the Huntley generation plant, the NYISO announced that the solicitation for solutions will be issued on November 1, 2015. Solutions will be due on December 31.

Further coordinated analysis by National Grid and the NYISO is necessary to determine impacts to reliability on both the local non-bulk transmission system and the Bulk Power System due to the retirement of Huntley and the mothballing of Dunkirk. This coordinated analysis will include consideration and evaluation of operating procedures and modifications to system configurations. The NYISO will also assess the resource adequacy of the overall system with the Huntley and Dunkirk units removed for the ensuing five years. The NYISO and National Grid will provide a coordinated follow-up response to the Department of Public Service by October 30, 2015. A solicitation for solutions will be issued by the NYISO on October 30, 2015.

9.3 2014 RNA – Requests for Developer Qualification applications were received from both NYCA TOs and out-of-state companies for construction of reliability based transmission solutions. The Qualified Developers have been notified.

9.4 2014 CRP – 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.

9.5 Interregional Transmission Studies

i. EIPC Study – For 2015, EIPC members will create roll-up integration for summer and winter peak power flow cases of the Eastern Interconnection representing the year 2025. The gap analysis and

linear transfer analysis will be performed and compiled in a Roll-up Model Report. In late 2015, EIPC will seek stakeholder feedback on potential scenarios of interest for analysis in 2016.

The Gas-Electric System Interface Study is being performed by Levitan & Associates. The baseline assessment of the existing system was completed on April 14, 2014. It included an evaluation of the capability of the gas system to satisfy the needs of the electric system completed on March 10, 2015 and the identification of gas-side contingencies that could impact electric reliability completed on March 27, 2015. A review of dual fuel capability was completed on December 1, 2014. The draft report was presented to stakeholders in May 2015. The final report was delivered to DOE for comments in June 2015. The final report was delivered to DOE in July 2015.

- ii. **IPSAC** – FERC issued an order on May 14, 2015 on the NYISO/PJM/ISO-NE interregional compliance filing from 2013. It largely accepted the Amended Northeastern Protocol and associated tariffs, but a further compliance filing is required to address relatively minor issues. Revisions were discussed at the NYISO IPTF on June 25, 2015 and the filing was submitted on July 13, 2015.

Through 2015, NYISO, PJM, and ISO-NE will be taking steps necessary to comply with Order 1000 and the protocol. An IPSAC meeting will be scheduled toward the end of 2015.

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 define rules to allow incremental generation behind the meter to participate in the NY Wholesale Electricity market. The NYISO is having on-going stakeholder discussions to fully develop the market design and establish the rules for participation in the energy and capacity markets. The NYISO received concept approval of the market design in September 2015 and is working with stakeholders to develop corresponding tariff language.

The Comprehensive Shortage/Scarcity Pricing tariff changes and the November 2015 implementation date were approved by FERC. The NYISO has engaged stakeholders in a review of market design improvements to enhance the scarcity pricing mechanisms and is evaluating alternative market design solution options suggested by stakeholders. The NYISO will seek stakeholder approval in October 2015. The NYISO is reviewing various options for recognizing fuel-constraints through additional Fuel Constrained Bidding Features to evaluate interest in further developing the concept. Incorporating the fuel limitations directly in the software will allow for efficient use of resources to meet reliability needs. The NYISO proposed a defined scope of work in October 2015 to prioritize efforts for further concept development and stakeholder evaluation.

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

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 of, and development of solutions for potential generator retirements. The NYISO has developed a proposed solution framework and is working with stakeholders to review the program structure and tariff language in preparation for submitting a compliance filing on October 19, 2015. 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. Also, the NYISO is seeking stakeholder input on alternate methodologies. The NYISO will brief the ICS on these discussions.

The NYISO has selected Analysis Group to lead the Demand Curve reset evaluation. Stakeholder discussions will begin on October 19, 2015.

11.0 Other Items

11.1 NYISO Operations Report – Mr. Yeomans reported that the monthly peak load occurred on Tuesday, September 8, 2015 at 31,058Mws, just 80Mws below the summer peak. The Operating Reserve requirement at the time was 1965Mws resulting in a minimum Operating Capacity requirement of 33,023Mws. Very low fuel prices have caused low marginal costs throughout the month. There was a substantial amount of transmission maintenance exacerbated by the initiation of the PSC approved TOTS upgrades. There were no Major Emergencies. Alert states were declared on 7 occasions - 3 times for declared emergency transfers. There were no TLR Level 3s declared during the month. Reserve activations occurred 13 times. No emergency actions were taken. A NERC/NPCC Reportable DCS Event at 09:18 on September 4, 2015. A RPU and SAR were initiated for loss of Nine Mile 1 at 600Mws. Ace crossed zero, and the RPU was terminated at 09:28. The SAR was terminated at 9:40. At 10:59 on September 4, 2015, a RPU was initiated for loss of Bowline 1 loaded at 550MWS. Ace crossed zero, and the RPU was terminated at 11:08.

The NYISO will be giving a presentation on its Winter Capacity Assessment to the OC, MC and NYSRC in November 2015.

11.3 North American Energy Standards Board (NAESB) – Mr. Ellsworth reported that FERC issued an order asking NAESB to develop a Standard that would better coordinate the scheduling of nominations and confirmations of the electric and gas industries. NAESB plans to begin in the middle of 2016 because of re-hearing requested by two companies.

11.4 Mr. Adamson introduced Melissa Lynch who will be replacing Carol Lynch as Administrative Assistant starting January 2016.

12.0 Visitors' Comments – None

13.0 Meeting Schedule

<u>Mtg.</u>			
<u>No.</u>	<u>Date</u>	<u>Location</u>	<u>Time</u>
199	Nov. 6, 2015	Albany Country Club, Voorheesville, NY	9:30 A.M.
200	Dec. 4, 2015	Albany Country Club, Voorheesville, NY	9:30 A.M.

The Executive Committee Meeting #198 adjourned at 12:00 P.M.