

Minutes
New York State Reliability Council, LLC (NYSRC)
Executive Committee (EC) Meeting No. 225
January 11, 2018
New York ISO
10 Krey Boulevard, Rensselaer, NY

Members and Alternates

In Attendance:

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| Curt Dahl, P.E. | PSEGLI - Member – EC Chair |
| Roger Clayton, P.E. | Unaffiliated Member – EC Vice Chair, RRS Chair, RCMS Chair |
| George Loehr | Unaffiliated Member |
| George Smith, P.E. | Unaffiliated Member |
| Bruce Ellsworth, P.E. | Unaffiliated Member |
| Richard Bolbrock, P.E. | Municipal & Electric Cooperative Sector – Member |
| Rich Brophy | NYSEG and RG&E – Alternate Member - Phone |
| Frank Pace | Central Hudson Gas & Electric – Member - Phone |
| Mayer Sasson | Consolidated Edison Co. of NY, Inc. - Member |
| Mark Domino, P.E. | National Grid, USA-Alternate Member-Phone |
| Lawrence T. Hochberg P.E | New York Power Authority (NYPA) – Alternate Member -Phone |
| Mike Mager | Large Consumer - Member |
| Matt Schwall | Wholesale Seller - Member |
| Chris Wentlent | Wholesale Seller - Alternate Member - Phone |

Other Attendees:

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| Paul Gioia, Esq. | Whiteman, Osterman & Hanna, LLP – Counsel |
| Al Adamson | NYSRC Treasurer and Consultant-Phone |
| Mariann Wilczek | PSEGLI – ICS Chair |
| Carl Patka, Esq. | New York Independent System Operator (NYISO) |
| Zach Smith | New York Independent System Operator (NYISO)* |
| Robb Pike | New York Independent System Operator (NYISO)* |
| Emilie Nelson | New York Independent System Operator (NYISO) |
| David Allen | New York Independent System Operator (NYISO)* |
| Phil Fedora | Northeast Power Coordinating Council, Inc. |
| Vijay Puran | NYS Department of Public Service |
| Herb Schrayshuen | NYSRC EC Secretary |

Visitors - (Open Session):

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| John Tigue | New York State Electric & Gas Company-Phone |
| Erin Hogan | NYS Department of State – Utility Intervention Unit |

“*” Denotes part-time participation in the meeting

1. **Introduction** – C. Dahl, EC Chair, called the NYSRC Executive Committee Meeting No. 225 to order at 9:35 a.m. on January 11, 2018. A quorum of thirteen Members and Alternate Members of the NYSRC EC was established.
 - 1.1. **Visitors** – The visitors and attendees on the phone were identified.

- 1.2. **Requests for Additional Agenda Items** – There were no additional agenda items proposed for the open meeting.
- 1.3. There was no report on the December 8, 2017 Executive Session.
- 1.4. **Executive Session Topics** – Two Executive Session topics was proposed. An Executive Session was held after the open meeting concluded.
- 1.5. **Declarations of Potential “Conflict of Interest”** – There was one declaration of a potential conflict of interest related to work to be performed by J. Adams. The potential conflict was discussed and the work was determined to not pose a conflict of interest as long as J. Adams was not concurrently involved on behalf of the Quanta in the MDMS2 Project.

2. Meeting Minutes/Action Items List

- 2.1. **Approval of Minutes for Meeting No. 224 (December 8, 2017)** – H. Schrayshuen introduced the revised draft minutes of the December 8, 2017 EC Meeting (Attachment #2.1) which included all comments received. Minor editorial changes were offered by P. Fedora during the meeting. B. Ellsworth made a motion to approve the minutes of Meeting #224 as modified. The motion was seconded by G. Smith and unanimously approved by the EC members in attendance (13 - 0). The EC Secretary will arrange to have the final minutes for EC Meeting # 224 posted on the NYSRC website.
- 2.2. **Review of Outstanding Action Items List** – H. Schrayshuen presented the Action Item List in Attachment #2.2 noting that the currently due AI #224-3 would be resolved in the course of the EC meeting. In regards to AI 224-1 P. Gioa noted that a working group has been formed to begin the process of reviewing Policy 5: Section 2 and he welcomed others interested in participating to inform him of their interest. A. Adamson offered language changes to AI 224-2 and R. Clayton proposed that the due date for AI 224-2 be set to March 9, 2018.

3. Organizational Issues

3.1. Summary of Receipts & Disbursements

- 3.1.1. **Statement of Cash Receipts and disbursements** – A. Adamson presented Attachment #3.1.1 - Statement of Cash Receipts and Disbursements for December 2017. He estimates that the year cash balance is \$221,000 but it must be adjusted for total prepayments of \$90,000. This yields a total year-end balance of \$131,000 as compared to the prior month’s projection of \$120,000. G. Smith noted that the R&D expense is under budget due to a late start in the project. A change in budget will not made to adjust for the change and variances will be explained as they occur in the future. M. Sasson noted that 2017 expenditures are substantially under budget but there should be no concern about using the \$50,000 contingency fund if needed. A. Adamson informed that the affiliated EC members will be receiving a letter from the NYSRC Auditor to confirm payments in the near future.

3.2. Code of Conduct – P. Gioia

- 3.2.1. P. Gioa reviewed the NYSRC Code of Conduct Resolution. H Schrayshuen noted that he has two outstanding Conflict Disclosure forms at the EC level. M. Wilczek noted she has three outstanding Conflict Disclosure forms for the ICS. R. Clayton noted that for his subcommittees he has three outstanding Conflict Disclosure Forms for the RRS and RCMS.

4. Installed Capacity Subcommittee (ICS) Status Report/Issues –M. Wilczek, ICS Chair – Attachment #4.1

- 4.1. **ICS Chair Report** - M. Wilczek addressed the ICS report details as shown in Attachment #4.1. She noted that the ICS reviewed its milestone schedule for 2018 and will bring the schedule to the EC in its February meeting. Additionally the ICS discussed its task list for 2018. She noted some of the tasks are multi-year tasks. The integration of DER is going to be outlined after conferring with NYISO subject matter experts. R. Clayton noted that the RRS has discussed the same item and he will cover it in his

report to include impacts of DER beyond ICS. C. Dahl suggested a meeting with the NYISO Load Forecasting Task Force (LFTF). M. Wilczek noted the ICS is considering an update to the emergency support limit. The alternative LCR Methodology is proposing a transmission security limit and how that limit would be included in the next ICR study. Load shape selection will be reviewed along with exports to New England which will also be reviewed in light of changes in the ISO-NE market structure. There was extensive discussion regarding the need for load shape review. Outlines for the various IRM process change initiatives will be presented to the EC as they are developed. M. Mager asked for background regarding the prior load shape selection. C. Dahl refreshed the participants regarding the “bookend” concept for load shape selection involving a shape with a steep load factor, flat load factor and a typical load factor year. This effort will be undertaken in light of the expected impact of DER including behind the meter DER. This is anticipated to be a two to three year effort and will not be incorporated into the next IRM study. R. Bolbrock suggested that some sensitivity cases using more recent load shapes be incorporated into the current IRM study. E. Hogan noted that there are additional changes likely sure to the introduction of electric vehicles which should be taken into account to make the load shape assumptions more responsive to near term changes. M. Sasson raised the concern regarding how to handle an outcome if the Tan (45) result was lower than the security floor. The lessons learned effort will be discussed at the next ICS meeting including the coordination issues experienced in the past with GE. E. Nelson noted that standard updates and monthly conference calls are held in heavy work periods. E. Nelson reported that GE has added new team members.

4.2. NJ Board of Public Utilities Complaint to FERC – This topic was discussed in Executive Session.

5. Reliability Rules Subcommittee (RRS) Status Report/Issues –R. Clayton, RRS Chair

5.1. RRS Status Report & Discussion Issues – Attachment #5.1- R. Clayton reported on the status of the RRS activity identifying that there are two PRRs under development. PRR 128 continues to be tabled pending outcomes in the NPCC A-10 criteria review. PRR 141 (NYCA IRM) and PRR 142 (LSE ICAP Requirements) clarifications are awaiting further developments with a likely request in March 2018 to the EC for posting for comments. A. Adamson noted the ICS will review the PRRs in its next meeting.

5.2. New/Revised Reliability Rules Outstanding – Attachment #5.2
No comments have been received to date on PRR 139 (Loss of Gas Supply to New York City).

5.3. Presentation on the NPCC A-10 proposed BPS identification processes – Attachment #5.3 - R. Clayton provided an overview of the NPCC presentation materials to explain the current status of the NPCC A-10 review to the EC. He noted that Phase 1 has been completed and that Phase 2 in 2018 will involve testing of the various methods. He noted that the NYSRC interest and concern is in the definitions of local area and radial subsystems as they may be modified by the process and that in the past there has been inconsistent application of the definition. The accompanying Phase 1 report is available to NPCC members on the NPCC website.

5.4. Other RRS Issues – R. Clayton reported on the RRS discussion regarding the impact of new technology on reliability noting that the NYISO has a road map for energy efficiency, market changes that may have a significant impact on load. He suggests a presentation by the NYISO on the programs. He noted that behind the meter energy efficiency reduction could range from minus 230 MW to minus 1,217 MW, DER Solar currently at 450 MW projected to go to 1,176 MW and “other” category projects to move from 233 MW to 375 MW. He noted that on the NY Transmission System there is 1,827 MW of wind predicted to go to an additional 4,807 MW. Regarding utility scale solar there is expected to be 32 MW to 881 MW. He expressed concern that the net impact on reliability of all of

these concurrent changes in both directions (plus and minus), including impact on short circuit calculations which typically and conservatively assume all generation is in service. He proposed that an event be planned where the NYISO and others provide presentations on these various load and generation modification forecasts and programs. The purpose is to develop potential PRRs regarding these changes for the NYSRC EC consideration. P. Gioia noted that transmission owners are deeply involved in various programs and he offered to foster their engagement in the planned event. It was the general conclusion that a full day event may be required to cover the subject matter. Z. Smith volunteered to be the NYISO contact to help coordinate participation in such an event. (AI 255-1). E. Nelson noted that these topics may also involve market design initiatives. R. Clayton recommended that the focus of the event be on reliability impacts of the system and load changes and to discuss methods to project and analyze the future changes. E. Hogan suggested that emphasis on load related efficiency programs be added because there is a lot of activity in that area. She noted recent initiatives in battery storage and air source heat pumps (which increase electric load) and advocated those topics be included in the scope. The target is to develop an agenda for review at the March EC meeting.

Additionally, R. Clayton noted that the 2017 RRS report is under development. He further noted that FERC has rejected the DOE's proposed Resilience Rule and initiated a new proceeding to define the term "resilience".

6. Reliability Compliance Monitoring Subcommittee (RCMS) Status Report –R. Clayton, RCMS Chair

6.1. 2017 Reliability Compliance Program – Attachment #6.1

6.1.1. R. Clayton reviewed the RCMS report of RCMS meeting #215. He noted that RCMS has found the NYISO in full compliance with; Real Time Operations of the NYS BPS (C8:R1), NYISO System Restoration Procedures (F.1:R1).

6.1.2. The 2018 Reliability Compliance program is underway.

6.2. RCMS Status Report –Attachment #6.2

6.2.1. R. Clayton noted that the Compliance Program for 2017 has been completed with the exception of the 2017 Real Time Operations report for December 2017. The 2018 Compliance Program is under development and it is expected to be available in draft for the February RCMS meeting. Review for approval by the EC expected at the February EC meeting.

6.3. Other RCMS Issues-The 2017 RCMS final report is under development.

7. Environmental Report – Attachment #7.1 - R. Clayton called the meeting participants attention to Attachment #7.1 providing the notes of the meeting with the NYSDEC on December 21, 2017. He identified several high profile discussion topics noting in particular that the States of Virginia and New Jersey may join the RGGI. He noted that the EPA Clean Power Plan is in the process of being repealed and there is a NOx program review underway to feed assumptions into the RNA along with the peaker emissions regulation.

8. NERC/NPCC Standards Tracking – A. Adamson called the meeting participants attention to Attachment #8.1. There were no questions regarding the standards or ballots.

9. Reliability Initiative – G. Smith, G. Loehr

9.1. MDMS Phase 2 Project Status – G. Smith called the meeting participants' attention to Attachment #9.1 providing the notes of the MDMS2 kick-off meeting on December 13, 2017. He noted the active participation of the NYISO. He called the meeting participants to the fact that there will be both transient and dynamic stability analysis included in the study scope. There will be five in-person meetings hosted by the NYISO. The New York Transmission Owners will be requested to provide their

behind the meter DER forecasts along with protection system information. P. Gioia noted that he reviewed the contract and noted a lack of clarity relative to contributors and notices. An action item relative to the review of the status of existing intellectual property and new intellectual property created as a result of the project was requested and assigned to G. Smith for investigation (AI-225-2).

10. State/NPCC/Federal Activities

10.1. NPCC Board of Directors Report – M. Forte

H Schrayshuen directed the meeting participants' attention to the report in Attachment #10.1 from M. Forte summarizing the 2017 NERC Long Term Reliability Assessment (LTRA) and noting some of the highlights. There was no report regarding NPCC Board activities.

10.2. NPCC Report – P. Fedora

P. Fedora noted the NERC 2018 LTRA will be initiated in the near future and will include a probabilistic assessment. The next meeting of the NPCC RCC will be February 28. He noted two planned agenda items; the NPCC Natural Gas Disruption Risk Assessment and the probabilistic NPCC Reserve Margin Evaluation. The NPCC Board meeting is scheduled for January 31, and will include a review and approval of the NPCC 2018 Corporate Goals. He noted the new FERC proceeding on resilience and the related activity of the NERC Reliability Issues Steering Committee to present its Reliability Issues Report and resilience framework to the NERC Board of Trustees at its meeting in February. He noted that in New England the cold snap and winter storm resulted in heavy dependence on oil generation (over 30%). On January 23 there will be a meeting with the Regional Entities, NERC and FERC staff on planning and operations with increasing amounts of variable generation. The TFCP will be meeting to develop an Action Plan for testing of the proposed A-10 methodologies. There is also underway a NPCC Strategic review of NPCC's more stringent Criteria.

11. NYISO Status Reports/Issues

11.1. NYISO System and Resource Planning Status Report, November, 2017- Z. Smith – Attachment #11.1

Z. Smith reviewed the status of the selected planning activities. He noted that preparations for the Reliability Needs Assessment (RNA) are underway. He reported NYISO is continuing its discussions with the NYS DEC regarding the reliability impact of emissions regulations for downstate gas turbines. NYISO plans to incorporate proposed new environmental regulations and emissions constraints into the assumptions used for the next cycle of the RNA. The Indian Point Study has determined that there is no reliability issue as a result of the decommissioning of Indian Point generating station assuming three new generating plants come into service as currently scheduled. He reported that the CARIS process results will be presented in the near term and that it is not clear whether any economics based transmission projects will be proposed as a result. The Public Policy AC Transmission process may report results by the end of the first quarter 2018 with a NYISO Board decision on potential projects in July 2018. He reported that in 2018 the NYISO is starting a comprehensive review of Attachment Y of the NYISO Tariff. Concepts will be developed to make the NYISO planning process more effective. He solicited stakeholder input on the proposed changes. R. Bolbrock noted that the separation of reliability from economics has created a set of planning processes that are lengthy and difficult to implement as evidenced by the fact that no CARIS project has ever been approved. P. Gioia noted that an NYPSC decision on the 2016 Public Policy recommendations is still outstanding. The next NYISO solicitation for public policy projects will occur in August 2018 and it was suggested by P. Gioia that the next NYISO submittal include a reminder of the need for action on the 2016 recommendation. Z. Smith

noted that there was an Interregional Planning Advisory Committee meeting on December 11, 2017 to discuss matters as listed in Attachment #11.1.

11.2. NYISO Markets (items relevant to reliability) – R. Pike - Attachment #11.2

R. Pike reviewed the submitted NYISO Markets report in Attachment #11.2 covering several topics. He call the meeting participants attention to the Market Assessment for Accommodating Public Policy focusing on a 50% renewable resource based future without new transmission or generation retirement. The study results indicated very low prices to provide incentives to new resources. A significant need for an increase for flexibility was noted. He reported on current NYISO efforts for the current study is underway to reduce the twenty options to two or three options for further development.

11.3. NYISO Monthly Operations Report –W. Yeomans – Attachment #11.3

W. Yeomans reviewed the operating results for December 2017 as outlined in Attachment #11.3. He noted that the recent thirteen day cold snap was a significant event. He will present a detailed review of the event at the March EC meeting. He emphasized the new reports in Attachment #11.3 which report the performance of wind resources by load zone. Wind curtailment due to transmission constraints was 3,900 MWh. The cold snap which started on December 26, 2017 and concluded January 7, 2018 included record low daily average temperatures across numerous New York cities. The last three days of the cold snap included a coastal blizzard from January 4-6. He noted that Hydro Quebec set a new all-time winter peak in the period. He also noted transmission infrastructure performance was excellent during the period and commented that the new second Ramapo PAR was operationally very beneficial. Gas pipelines issued progressively severe operational flow orders during the period, eliminating gas fired generation in the last few days of the cold snap with high gas prices making oil firing the economic choice at times near the end of the cold snap.

12. NAESB Report – B. Ellsworth

The NAESB Advisory Council will meet in Washington DC in March. B. Ellsworth reported the most recent NAESB Board meeting dealt with mostly administrative matters.

13. Visitor Comments & Offer of thanks

There were no visitor comments.

14. Adjournment of the EC Open Meeting

Executive Committee Meeting #225 was adjourned at 12:15 P.M. An Executive Session of the EC followed the conclusion of the open meeting.

15. Future Meeting Schedule

| Meeting No. | Date | Location | Time |
|-------------|------------------|-----------------|---------|
| #226 | February 9, 2018 | Conference Call | 9:30 AM |