

**Minutes**  
**New York State Reliability Council, LLC (NYSRC)**  
**Executive Committee (EC) Meeting No. 245**  
**September 13, 2019**  
**Wolferts Roost Country Club**  
**120 Van Rensselaer Blvd, Albany, NY 12204**

**Members and Alternates in Attendance:**

|                       |  |
|-----------------------|--|
| Roger Clayton, P.E.   | Unaffiliated Member – EC Chair, RRS Chair, RCMS Chair                |
| Rich Bolbrock, P.E.   | Unaffiliated Member  |
| Bruce Ellsworth, P.E. | Unaffiliated Member  |
| George Smith, P.E.    | Unaffiliated Member  |
| Frank Pace            | Central Hudson Gas & Electric – Alternate Member                     |
| Mark Domino, P.E.     | National Grid, USA – Member – Phone                                  |
| Tim Lynch             | NYSEG and RG&E – Member  |
| Rick Brophy           | NYSEG and RG&E – Alternate Member – Phone                            |
| Lawrence Hochberg, PE | NYP&A – Alternate Member – Phone                                     |
| Curt Dahl, P.E.       | PSEG-LI– Member  |
| Mike Mager            | Couch White - Large Consumer Sector – Member                         |
| Matt Schwall          | Independent Power Producers of NY -Wholesale Sellers Sector - Member |
| Mark Younger          | Hudson Energy Economics - Wholesale Seller - Alternate Member        |
| Chris Wentlent        | Municipal & Electric Cooperative Sector – Member                     |

**Other Attendees:**

|                     |   |
|---------------------|---|
| Paul Gioia Esq.     | Whiteman, Osterman & Hanna, LLP – NYSRC Counsel                     |
| Al Adamson          | NYSRC Treasurer and Consultant – Phone                              |
| Howard Kosel        | Consolidated Edison Co. of NY, Inc – ICS Chair – Proxy for M Sasson |
| Phil Fedora         | Northeast Power Coordinating Council, Inc.                          |
| Commissioner Burman | NYS Public Service Commission                                       |
| Carl Patka          | New York Independent System Operator                                |
| Rick Gonzales       | New York Independent System Operator                                |
| Rana Mukerji        | New York Independent System Operator – Phone*                       |
| Josh Boles          | New York Independent System Operator                                |
| Aaron Markham       | New York Independent System Operator                                |
| Herbert Schrayshuen | Power Advisors, LLC – EC Secretary                                  |
| Cori Tackman        | Power Advisors, LLC   |
| Mariann Wilczek     | PSEG-LI – Phone   |
| Ken Larnuea         | Direct Energy   |

“\*” Denotes part-time participation in the meeting

1. **Introduction** – R. Clayton, EC Chair called the NYSRC Executive Committee Meeting # 245 to order at 9:30 a.m. on September 13, 2019. A quorum of 13 Members and Alternate Members of the NYSRC EC was established.
  11. **Identification of Visitors** – Visitors in the room and on the phone were identified.
  12. **Requests for Additional Open Session Agenda Items** – R. Clayton noted an additional agenda item #5.3 would be a briefing on the United Kingdom blackout on August 8, 2019.
  13. **Request for Executive Session Agenda Items** – None
  14. **Report on EC Executive Session meeting of August 9, 2019** – R. Clayton stated that in the previous EC Executive Session there was discussion regarding the NYSEERDA Program Opportunity Notice #4070. It was agreed that the NYSRC should not respond to the Notice at this time. It was also discussed that the NYSRC should observe and comment when appropriate to the New York State proposed Climate Action Council related activities, but action is not needed at this time. There was a presentation by ConEd on the July 13 disturbance. R. Clayton stated that the NYSRC received a request from the New York City Council to participate in a hearing on the ConEd outage. The NYSRC declined request stating the cause of the disturbance was due to facilities not in the Bulk Power System. The last item discussed was that with Mike Forte retiring from ConEd, the NPCC Board Member position representing Sector 7 is currently open. M. Sasson expressed interest in representing Sector 7 on the NPCC Board. The EC supported M. Sasson’s request and NYRSC has submitted a nomination proposing M. Sasson for the position.
  15. **Declarations of Potential “Conflict of Interest”** – There were no declarations of new potential conflicts identified.

**2. Meeting Minutes/Action Items List – H. Schrayshuen**

21. **Approval of Minutes for Meeting No. 244 (August 2019) – Attachment #2.1** – H. Schrayshuen introduced the revised draft minutes of the August 9, 2019 meeting, which included all comments received as of August 26, 2019. R. Bolbrock mentioned an incorrect date and P. Gioia made changes to section 4.3. R. Bolbrock made a motion to approve the minutes of Meeting #244 including the suggested changes. The motion was seconded by B. Ellsworth and unanimously approved by the EC members in attendance (13 - 0). The EC Secretary will arrange to have the final minutes for EC Meeting #244 posted on the NYSRC website.
22. **Review of Outstanding Action Items List – Attachment #2.2** – H. Schrayshuen reviewed and updated Attachment #2.2 based on the EC member comments.

**3. Organizational Issues**

31. **Summary of Receipts & Disbursements**
  - 3.1.1. **Statement of Cash Receipts and Disbursements – A. Adamson - Attachment #3.1.1** - A. Adamson presented Attachment #3.1.1 – Statement of Cash Receipts and Disbursements for August 2019, noting the end of month balance of \$154,319.97 which includes \$55,000.00 of prepayments.
  - 3.1.2. A. Adamson stated that after reviewing the projected expenses and the current cash on hand, he has determined that a 2019 4<sup>th</sup> quarter Call for Funds of \$30,000 per Transmission Owner is needed. This request will bring the total for the Call for Funds for 2019 to \$105,000.00 for each Transmission Owner.
32. **Other Organizational Issues** – None

**4. Installed Capacity Subcommittee (ICS) Status Report/Issues – H. Kosel, ICS Chair**

41. **ICS Chair Report – Attachment #4.1** – H. Kosel reviewed attachment #4.1 –

Summary of ICS meeting #223 on September 4, 2019. H. Kosel stated the NYISO and GE gave a presentation on the High Renewable Sensitivity activities. The presentation was focused on the offshore wind modelling which utilized NREL wind data for the analysis. The NREL data was adjusted to account for wake losses, electrical losses and forced outages. This analysis will be reported as a separate white paper and will not be included in the 2020 IRM report. The NYISO also presented a comparison of SCR performance during actual events compared to performance during tests. Based on the data provided, SCR performance during tests and events was 68% effective and declined to 63% during actual events. Going forward, ICS will consider new methods of modeling SCRs. This more in-depth examination of SCR modeling will become a Whitepaper later on in the year. Other future Whitepapers will include Modeling of Energy Limited Resources, Simplifying the External Area modeling, and Load Shape modeling. R. Bolbrock suggested a Whitepaper to analyze roof top solar generation performance. H. Kosel is going to bring R. Bolbrock's request to the ICS for further discussion. H. Kosel stated that the NYISO does currently perform the study that R. Bolbrock is suggesting and the study is included in the Reliability Needs Assessment (RNA). The ICS will discuss the matter and determine if that study should be broken out separately or continue to be included in the RNA.

- 42. Review and Approval ICS Parametric Analysis –Attachment #4.2 – EC Approval Item** – H. Kosel reviewed the 2020 Parametric Study noting it starts with a 16.7% base IRM. He noted that a major parameter that increases the IRM was Load Forecast Uncertainty. It was noted that the load uncertainty data had not updated for the past two IRM studies, (2018 and 2019). The current load shape model includes data from 2011, 2016, and 2018. It was noted that as temperature decreases there is not a large drop off in the load as there has in the past. M. Mager suggested that some explanation be provided in the report. C. Dahl stated that he agrees with M. Mager and that more explanation is needed in the report. Another major factor increasing the IRM was a change to the External Area Replacements, which includes the impact of a previous EC decision to model the HQ Wheel to ISO-NE in the base case.

M. Younger stated the 2017 IRM was 18.0%, 2018 IRM was 18.2%, and 2019 was 16.7%, and currently the 2020 base case is 18.6%. M. Younger suggested to have more explanation on why 2019 may be an outlier.

The major drivers of decreases in the IRM were updated transmission topology, which accounted for Cricket Valley going into service, and an increase in transfer capability between Long Island and New York City.

R. Clayton initiated a discussion on why the 2019 IRM result may be an outlier. J. Boles stated two major changes between 2019 and 2020 were, that the previous EC decision to include the HQ Wheel in the modeling of the base case resulted in .06% increase and the External Area Models were not updated for the 2019 IRM. The External Area Models are updated for the 2020 study under the new Policy 5 changes. R. Bolbrock suggested that an explanation be added to the IRM report regarding the decision to model the HQ Wheel. The Load Forecast Uncertainty increased due to model re-estimates resulting from the addition of the most recent load data. J. Boles stated that the models used for Load Forecast Uncertainty are not just the NYISO's. ConEd and PSEG-LI use their own models and all of the models are yielding similar results. There was discussion on the graphic in attachment #4.2 and the EC asked that

new graphics be circulated to show the Tan 45 determination. B. Ellsworth made a motion to approve the 2020 Parametric Analysis with the addition of the new graphic. The motion was seconded by M. Schwall and unanimously approved by the EC members in attendance (13 - 0). J. Boles will send the new visual to H. Schrayshuen who will distribute it to the EC. (AI-245-1). The next steps for the 2020 IRM study are to finalize the assumptions matrix, running the sensitivities and then move onto the Final Base Case.

**43. Other ICS Issues - None**

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

**51. RRS Status Report Discussion Issues – Attachment #5.1-** R. Clayton reported on attachment #5.1 providing a summary of RRS meeting #245, which took place on September 5, 2019. There are currently 5 PRRs under development. PRR 128 is tabled pending the NPCC A-10 revision completion. For PRR 142B – B.2, RRS is monitoring NPCC RAS/SPS activity. After further discussion and investigation, it has been determined that there is no need for PRR 142 – 2B. The PPR requester was not at the last RRS meeting and RRS is waiting for any additional comments from him before removing this PRR from the list. PRR 143 Loss of Gas Supply has been tabled until the NYISO finalizes the 2024 Fuel and Energy Security Study, which may provide more information for development of the PRR. PRR 145 – Review of Resource Adequacy, Long Term. This PRR is examining the current A3 rule considering a longer term resource adequacy review than the current three year requirement. Due to the uncertainty of the reliability impacts of legislation which mandates a significant increase in renewable resource penetration, the RRS is considering utilizing the ongoing NYISO Reliability Needs Assessment. Involving the current year plus nine more years, as the source for this required long term resource adequacy assessment. RRS is working on a draft rule to be reviewed by the EC. PRR 146 – B.2 Transmission Planning Assessments, RRS is looking at special studies for generator or energy storage unit interconnections. RRS is currently working on a draft of this PRR. There was discussion regarding the need for a rule pre-adoption of IEEE, NERC, and NPCC standard Reliability Rules to cover Inverter Based Resources/Distributed Energy Resources. R. Clayton stated that there is currently nothing referring to Inverter Base Resources in the NYSRC rules. G. Smith asked whether the NYISO’s RNA will be utilizing the NERC approved DER\_A modeling. C. Patka will take that question back to the NYISO. R. Clayton asked C. Patka to facilitate a meeting to discuss the potential PRR with the NYISO. (AI-245-2). There was also continued discussion on the NYS’s high penetration of renewables target and the need for more generating resources to support to support the renewables, thereby increasing the IRM.

**52. List of Potential Reliability Rule Changes – Attachment #5.2 –** R. Clayton stated that the table is up to date.

**53. Other RRS Issues –** R. Clayton gave a briefing on the blackout in the United Kingdom, which occurred on 8/9/2019 for EC information purposes. At the time of the blackout the United Kingdom had roughly 20,000 MW of load. The generation consisted of 30% Wind, 30% Gas, 20% Nuclear and 10% imports through interconnection outside of the UK. Concurrently, there was a lightning strike on a transmission circuit and loss of load of 1,131 MW from a combination of, off shore wind, steam generation and small imbedded generation. This caused a rapid fall in system frequency, which caused an additional 330 MW of load to be dropped from the system. The frequency

started to recover. The UK operator started to bring up generation and the system frequency was brought back to 49.1 hertz. As generation was returning a gas turbine (210 MW) tripped due to an equipment failure. All of the available quick start had already been deployed and the frequency started to decline. This 1,000 MW of load was shed, which enabled the recovery of the system frequency. There was additional discussion about the report and difference in US protection system practice relative to ride through capability of generators.

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

**6.1. RCMS Status Report – Attachment #6.1 - R. Clayton** reported on attachment #6.1, a summary of the RCMS Meeting #235 on September 5, 2019. R. Clayton reported that RCMS found the NYISO in full compliance for Real Time Operations of the NYS BPS (C8: R1) for July 2019. RCMS also found the NYISO in full compliance for LIPA Loss of Gas Supply Procedures and Actions (G.3:R2), SCR Performance (I.2:R4), SCR Performance (I.2:R4) and RIP SCR Performance Data reporting (I.2:R5). The NYISO is required to report a control center communication failure. No load was lost and the system came back on quickly. The RCMS found the NYISO in full compliance for Control Center Communications (H.1:R4). The RCMS also found the NYISO in full compliance for Mitigation of 9/3/19 Major Emergency Report (D.1:R9). There was a stability overload on central east and the NYISO took appropriate action. No load was lost. No further action is required.

**6.2 2019 Reliability Compliance Program – Attachment #6.2 – R. Clayton** stated scorecard is up to date.

**6.3 Other RCMS Issues – None**

## **7. NYISO Status Reports/Issues**

**7.1. NYISO Comprehensive System Planning Process – C. Patka – Attachment #7.1 – C. Patka** reported on behalf of Z. Smith. The 2018-2019 cycle of the Reliability Planning Process has been completed. The 2020- 2021 Reliability Planning Process cycle will further evaluate the system to identify reliability needs and potential market based and regulated backstop solutions. This will include an evaluation of potential regulatory impacts within the planning horizon, including the target of 70% of energy consumption sourced from renewables by 2030. The NYISO has initiated work on the next CARIS Phase 1 base case and the report will include a scenario for the 70% by 2030 state policy renewables requirement. The NYISO is currently developing agreements with selected developers on Segment A and Segment B of the Central East reinforcements. There have not been any additional transmission needs identified by the Public Service Commission.

**7.2. NYISO Markets Report – R. Mukerji - Attachment #7.2 – R. Mukerji** reviewed attachment #7.2. R. Mukerji noted the NYISO is continuing to work on market design changes for DER and Electricity Storage. The NYISO has concluded development of a carbon market design and is waiting for the NY Public Service Commission to endorse the design before proceeding towards implementation. The NYISO is looking to implement market functions for the Energy Storage Resources in the middle of 2020 and DER market design features will be introduced in 2021. Both market designs are currently being reviewed by FERC.

**7.3. NYISO Monthly Operations Report – A. Markham - Attachment #7.3 – A.**

Markham reported on behalf of W. Yeomans. A. Markham presented attachment #7.3. For the month of August there was a Peak Load of 28,488 MW on August 19, 2019. There were 29.30 hours of Thunder Storm Alerts and 0 hours of NERC TLR level 3 curtailment.

## **8 Distributed Energy Resources (DER) – G. Smith**

- 81. Report on DER Activities – Attachment #8.1** – G. Smith discussed attachment #8.1 – G. Smith reported on the NPCC DER Guidance document which provides a collection of DER related steps taken through NPCC to facilitate DER. Revision 1 was released on August 30, 2019. The document is an information document. It does not introduce new mandatory requirements but offers guidance.

The New York Interconnection Technical Working Group (ITWG) met 8/28/2019. There is a straw proposal for Coordination of Inclusion Rules for Interconnection Queues. The proposal is to include all project upgrades in all agreements. Due to lack of response to a previous survey, there is a new survey underway as part of NYSERDA PON 3770 – Smart Inverter setting guidance. Currently, New York does not have rules or guidelines on the application of smart inverter controls or settings. A Joint Utility Smart Inverter Team has been initiated with the goal of building a common understanding of utility efforts and industry knowledge and potential development of a high-level roadmap for inverter setting management. The next meeting of the New York ITWG is October 30 at New York Battery Energy Storage (BEST) offices.

The next NERC SPIDER Working Group meeting is scheduled for October 8-9 in Chicago, IL.

- 82. Other DER Issues** –. No other issues

- 9. Environmental Status Report/Issues – C. Wentlent** – C. Wentlent stated that the next NYSRC/DEC meeting is scheduled for September 19, 2019 at 9:00am. P. Gioia reported that the DEC has responded to comments on the Peaker Rule. The DEC will allow the combustion turbines subject to the Peaker rule to operate for black start situations. C. Patka noted that there is an exemption for black start in a State Administrative Procedure Act (SAPA) notice and that the revised rule continues to provided that NYISO still has the opportunity to designate generation to continue in operation to maintain reliability until permanent solutions can be built. C. Patka also stated the SAPA notice closed a loophole under which behind-the-meter- generation that does not sell into the NYISO’s wholesale electricity markets arguably did not have to comply with the emission requirements in the proposed rule. H. Schrayshuen asked if there was clarification on which units would be given the black start exception and if there are other units that should be included in case of future needs. R. Gonzales stated that once the “Peaker Rule” is approved, it is expected that black start facilities identified in the NYISO or Transmission Owner system restoration plans would be considered a black start unit for the purposes of the DEC exemption. C. Wentlent indicated that he would ask the DEC for clarification at the next meeting.

## **10. NERC/NPCC Standards Tracking – A. Adamson – Attachment#10.1**

- 10.1. NERC Standard Tracking – A. Adamson – Attachment #10.1** – A. Adamson stated the NYSRC voted yes for the modifications to TPL-007-4 on 9/6/2019. The modification did pass industry ballot.

**11. Reliability Initiative – G. Smith**– G. Smith stated that Henry Chao has presented the MSDS II concepts at both PJ&M and ISO-NE. It was decided that once the Non-CEII version of the final report is completed this Reliability Initiative agenda item will be removed as a standing agenda item.

**12. State/NPCC/Federal Activities – P. Fedora**

**121. NPCC Report – P. Fedora** – P. Fedora reported that the NPCC Reliability Coordinating Committee met on September 4, 2019. There were two NPCC revised Directories approved for NPCC member ballot. The directories were Directory #6 on Reserve Sharing and Directory #5 on Reserves. Con Ed gave a presentation on the July 13, 2019 disturbance event. There was also discussion on the 2019 NPCC Goal deliverables. The SS-38 Working Group presented the results of an Under-Frequency Load Shedding sensitivity testing using the DER\_A model. There will be a Gas/Electric Operators Table Top exercise on October 8, 2019. The purpose of the exercise will be to test communication. The next NPCC DER Forum is October 17 at NYPA Robert Moses plant in Lewiston New York. The DER Guideline is posted for review and comment.

The NPCC Board of Directors met in Halifax on September 4 and 5. There was a strategic session where the Board reviewed the NPCC Draft Strategic Plan. The Board did confirm that DER reliability at the transmission/distribution interface will remain a key focus area. They also approved the NPCC UFLS “errata”. The NPCC Board will consider M. Sasson’s Board member application to represent Sector 7 at the October 30 meeting.

**122. NERC Report – P. Fedora** – P. Fedora reported that the NPCC Operating Committee and Planning Committee met in joint session on September 10 and 11. There were presentations on the January 17, 2018 South Central Cold Weather event and the Argentina blackout. There was an update on the NERC Technical Committee restructuring. The new combined committee will be called the Reliability Security Committee (RSC), The NERC Board of Trustees will review the comments made on the restructuring and give an update of the implementation plan at the November 2019 NERC Board of Trustee meeting. The Electromagnetic Pulse (EMP) Task Force will conduct a WebEx on their work on September 13, 2019.

The Planning Committee met after the joint session and approved two guidelines. One on the DER\_A Model and the other on the Interconnection Requirements for BPS-Connected Inverter-Based Resources. Two previously approved reports were sent back for additional review. The reports are Standard PRC-19 Reliability Gaps and a SAR with revisions to address Dispersed Power Resources. There were presentations on the 2019 LTRA update and the Eastern Interconnection Frequency Response study update.

**13. NAESB Activities – B. Ellsworth** – B. Ellsworth referred for EC review a previously distributed document explaining what blockchain is and that the term is to be recast as “distributed ledger”.

**14. Visitor Comments** – None

**15. Adjournment of the EC Open Meeting**

The Executive Committee Meeting #245 was adjourned at 11:48am.

**16. Future Meeting Schedule**

| <b>Meeting</b> | <b>Date</b>      | <b>Location</b>   | <b>Time</b> |
|----------------|------------------|---|-------------|
| #246           | October 10, 2019 | Wolferts Roost Country Club<br>120 Van Rensselaer Blvd. Albany, NY<br>12204 | 9:30 AM     |