

**Joint Meeting of the
New York State Reliability Council, L.L.C. (NYSRC)
Reliability Rules Subcommittee (RRS) /
Reliability Compliance Monitoring Subcommittee (RCMS)
Thursday, March 1, 2018**

Final Minutes of RRS Meeting No. 223

RRS Members and Alternates:

Roger Clayton, Electric Power Resources (Chairman)
Larry Hochberg, NYPA (Vice Chairman)
Martin Paszek, Con Edison
Zoraini Rodriguez, PSEGLI/LIPA (Secretary)
Rahul Pandit, PSEGLI/LIPA
Brian Shanahan, National Grid
Brian Gordon, NYSEG

Non-Voting Participants:

Al Adamson, Consultant
Jim Grant, NYISO
Chris Sharp, NYISO
Mark Capano, NYISO
Sal Spagnolo, NYPA

Guests:

Dan Head, Con Edison
Vijay Puran, DPS
Paul Gioia, NYSRC Counsel
Michael Roszkowski, Con Edison

RRS Meeting No. 223 was called to order by Mr. Clayton at 9:30 AM.

1. Introduction

1.1 Executive Session

None requested.

1.2 Requests for Additional Agenda Items

Mr. Paszek requested an additional agenda item (3.4.1) to discuss voltage performance to the electric system and potential new rules associated with it.

2. Approval of Minutes / Action Items

2.1 Approval of RRS Minutes No. 222

RRS reviewed the Minutes from the last RRS meeting and they were accepted as final with minor changes.

2.2 RRS 222 Status Report to EC

Mr. Clayton presented to the RRS a copy of the 'RRS 221 Status Report' which he develops for the purpose of summarizing, at the next Executive Committee meeting, what RRS has done at its prior meeting.

2.3 RRS 222 Action Items List

Action Item 222-5: Ms. Rodriguez updated RRS with LIPA's first behind the meter resources, Cooper Solar that will be connected to LIPA's 69kV system and scheduled to be online this year. Mr. Clayton pointed out that the recent NYISO Gold Book has a section of "Solar PV Impact, Behind-the-Meter" and "Distributed Generation Impacts, Behind-the-Meter" forecast from 2017-2027 for both energy and capacity for each zone.

Mr. Clayton requested Ms. Rodriguez keep RRS up to date with this item. This action item status is changed to "Ongoing".

Action Item 222-4: Mr. Paszek stated that he has nothing to report at this time. This action item status is changed to "Ongoing".

Action Item 222-3: On agenda. This action item is completed.

Action Item 222-2: On agenda. This action item is completed.

Action Item 222-1: This action item has been completed.

Action Item 221-5: On agenda. This action item is completed.

Action Item 83-8: There was nothing new reported. The status remains as 'Ongoing'.

3. NYSRC Reliability Rules Development

3.1 PRR List

3.1.1 PRR List Outstanding

Mr. Clayton updated RRS on the status of PRR 128, specifically the status of the definition of “NYS Bulk Power System” at the NPCC. He reported that the NPCC CP-11 Working Group on the A-10 Review completed its development of three potential revisions to the A-10 testing method at the end of 2017. The next step is to test each one and present a recommendation by the end of 2018 for posting, comment and approval. RRS discussed the costs and benefits of making this A-10 revision.

Mr. Clayton pointed out that there are two cost categories to this revision. First, is the analysis itself. The current analysis performed at the NYISO level is very extensive. Second, the inclusion of the new busses that would be included in the A-10 study in the future could be very large with associated costs. This concern was pointed out and the comment was sent back to the CP-11 Working Group for consideration. Mr. Clayton suggested that this inclusion could be listed as part of the criteria.

Mr. Clayton also reported that PRR 139 was approved by the EC at the last EC meeting. PRRs 140 and 141 are on the agenda today for their “Compliance Element” pieces.

3.2. PRRs for EC Final Approval after Posting

3.2.1 None.

3.3. PRRs for EC Approval to Post for Comments

3.3.1 PRR 140 – A.1 (R1) Establishing NYCA Installed Reserve Margin (IRM) Requirements

Mr. Adamson presented PRR 140 – Section 8, 9 and 10 to RRS. He informed RRS that the word “on average” will be removed after ICS makes the final decision. Currently ICS has an action item to move this suggestion to CP-8, in order to be consistent with NPCC Directory 1. Mr. Adamson also pointed out that these changes could impact Policy 5, but we may not have to update it at the same time.

After a brief discussion, Mr. Clayton made a suggestion to make PRR 140 final and present it to the EC for final recommendation. RRS agreed. Mr. Clayton stated that he will make a recommendation to the EC to post PRR 140 for comments.

3.3.2 PRR 141 – A.2 (R1, R2) Establishing Load Serving Entity (LSE) Installed Capacity (IC) Requirements

Mr. Adamson presented PRR 141, Section 8 to RRS. He informed RRS that ICS has reviewed this PRR but provided no comments.

NYISO said that they have not received internal comments back yet. Mr. Clayton pointed out that NYISO can still give their comments even when this PRR is posted for comments. There was a suggestion that the word “analyses” be changed to “analysis”.

Mr. Clayton proposed to make PRR 141 final and present it to the EC. RRS agreed. Mr. Clayton stated that he will make a recommendation to the EC to post PRR 141 for comments.

3.4. PRRs for discussion

3.4.1 Con Ed Voltage Criteria due to Reactive Power resource.

Mr. Paszek explained that Con Edison is seeing new generators coming online in their system with a Generator Step Up (GSU) transformers and/or Light & Power (L&P) transformers with no Load Tap Changer (LTC). They came in with a fixed tap position. Although the D-curve and dynamic MVAR associated with the generators are good, without LTC, Con Ed is seeing a slow degradation of dynamic MVAR available to their system. Con Edison wants to explore the possibility of creating some kind of rules on new generation facilities to come with LTC on their GSUs and L&P transformers.

Mr. Paszek asked the following questions to RRS:

- 1) Are the other Transmission Owners seeing the same issues?
- 2) Should RRS create a new rule to address this issue?

Mr. Clayton pointed out that he thought the interconnection studies already have a similar requirement, which is to maintain certain power factor. Mr. Paszek agreed, however Con Edison preferred a dynamic response from new generators’ GSU and L&P transformers via LTC, not just no-load stepping in and out. He also mentioned that some of the old generators in the Con Edison system have an LTC that can move under load. When asked, Con Edison stated that they observed these issues in real time and at the planning level.

Mr. Clayton asked all TOs to take these questions back and be ready to discuss at the next meeting (AI 223-1).

4. NPCC Directories

Mr. Paszek reported that the request for NPCC clarification of “opening of any breaker” is still being hashed out at the TFCP. He reminded RRS that RCC would need to approve it first and then it can be posted. Con Edison went over the scenario that could cause Con Edison to drop load.

Mr. Clayton agreed that this discussion needs to go back to NPCC. He suggested that we could follow NPCC's rules or make it more stringent.

5. NERC SARS/Organization Standards

5.1 NERC Standard Tracking

Mr. Adamson reviewed the NERC Reliability Standard Development Tracking Summary (dated 2-19-2018) with RRS. He informed RRS that there is a ballot going on now pertaining to PER 003-2, which has no impact to NYSRC rules. He also mentioned that NPCC recommended voting yes, and he doesn't see any reason to disagree. Mr. Adamson stated that he planned to vote yes on PER 003-2.

6. Additional Agenda Items

6.1 REV Potential Impact on NYS BPS Reliability

Mr. Clayton acknowledged that DER (Distribution Energy Resources) is a new and significant technology that is being addressed at FERC, NERC, NPCC and at the NYISO. He reported that Mr. James Pigeon of the NYISO presented the "Distributed Energy Resource (DER) Roadmap & DER Pilot Program" at the ICS Meeting this week. The purpose of this presentation is mainly to present what the NYISO is doing to accommodate the DER by changing rules and mechanisms in the market.

Some of the highlights from this presentation:

1. The key player is the ESCO aggregator. The third party players are responsible for telemetry, metering & aggregation and forecasting for the resources. Similar to a generator, they provide retail and wholesale services to aggregator.
2. This aggregator will be restricted to the DER that will connect to the BPS transmission node.
3. Expecting to roll out this program in the year 2021. By year 2027, it is expected that at least a thousand or more DER will enter this program.
4. This program is expected to take this approach and roll into the existing market program.

This program will be transparent to the Transmission Owners since it is a state program. There was also concerns that these behind the meter resources could impact the reliability of the system. It was also mentioned that more RFPs will be going out in 2020.

Mr. Clayton pointed out that this is a very active program and it's a good thing that NYISO is leading this pilot program on how to handle the DER. He also informed RRS that ISONE is having significant solar growth as well. They have a report called the "Final 2017 PV forecast". This report stated that they are looking at an increase in solar from around 208MW in year 2018 to about 4700MW in year 2026.

Mr. Clayton also mentioned that everybody is aware of the increase in solar and the technical complexity that it brings. He pointed out that IEEE is working on IEEE 1571, Interconnection Requirement for Distributed Resources. This standard is still in draft and won't be completed until 2020 or possibly later. This standard aimed to define interconnection requirements for these devices connecting to the network, in particular voltage and frequency ride through.

Mr. Clayton discussed actions taken by ISONE to address this issue. He offered to forward these reports to RRS [**AI 223-2**].

Mr. Clayton also reported that FERC has issues with DER as well. FERC does not believe that they have sufficient information on the technical aspect of DER and aggregation reform. They are having a technical conference to gather more information on this, specifically to explore issues on DER impacts on the reliability of the BES system.

Mr. Clayton will send out the notice from FERC – technical conference calls, to RRS [**AI 223-3**].

6.2 2017 RRS Summary Report

Mr. Clayton presented the “2017 Reliability Rules Subcommittee Report” to RRS. He went over the number of PRRs accomplished last year. He then proposed to present this report to the EC. RRS approves.

6.3 Exceptions 8, 17 & 18

Mr. Hochberg asked for an update on the status of Con Ed's request to remove Exceptions 8, 17 and 18. Mr. Clayton reported that this request was presented at the last EC meeting. The EC decided to approve this request with a caveat. Since this is an unusual Exception removal approval, due to the unknown end date, the EC requested a phrase to go with the motion to reflect this uncertainty. The motion reads, “The Executive Committee hereby approves the removal of Exceptions 8, 17 and 18, contingent on the retirement of the Indian Point generating units. Con Edison and the NYISO will submit a statement to the NYSRC before the exceptions are actually removed to confirm that, under the system conditions that exist at that time, the removal of the exceptions will not result in any reliability criteria violation.”

Mr. Gioia pointed out that this is the first time that the EC approved removal of any Exceptions in advance. The statement is necessary given the current status of Indian Point at this time. A discussion ensued regarding how to record the rescissions in the Exceptions List and/or as an Action Item in the minutes. Con Edison suggested bringing this back for discussion at the next EC meeting. Mr. Clayton offered to report the wording of the Exceptions removal to RRS [**AI-223-4**]

7. Reports

7.1 NYSRC EC Meeting Reports

Mr. Clayton reported that Mr. Sasson Meyer was elected as a Vice Chair of the EC meeting. There were no other additional RRS items to report.

7.2 NYSRC ICS Meeting Report

Mr. Adamson reported that the ICS met on Wednesday. NYISO's James Pigeon gave a presentation on the "Distributed Energy Resource (DER) Roadmap & DER Pilot Program" at the ICS. RRS reviewed the presentation. Mr. Adamson pointed out that the NYISO staff embarked on this major project, which took over a year to complete, to look at the load shapes for future studies.

Mr. Adamson also mentioned that ICS is putting the assumptions together for the upcoming 2019 IRM study.

The meeting ended at 11:00 AM.

8. Next Meeting No. 224

Thursday, April 5, 2018; 9:30 AM @ NYSERDA, 17 Columbia Circle, Albany.