

**Joint Meeting of the
New York State Reliability Council, L.L.C. (NYSRC)
Reliability Rules Subcommittee (RRS) /
Reliability Compliance Monitoring Subcommittee (RCMS)
Thursday, March 31, 2016**

Minutes of RRS Meeting No. 200

RRS Members and Alternates:

Roger Clayton, Electric Power Resources (Chairman)

Larry Hochberg, NYPA (Vice Chairman) (Phone)

Zoraini Rodriguez, PSEG_LI/LIPA (Phone)

Martin Paszek, Con Edison (Secretary)

Roy Pfliegerer, National Grid (Phone)

Erin Doane, Central Hudson

Brian Gordon, NYSEG/RGE (Phone)

Non-Voting Participants:

Al Adamson, Consultant (Phone)

Matilda Duli, Con Edison (Phone)

Dan Head, Con Edison (Phone)

Brian Shanahan, National Grid

Kevin PePugh, NYISO

Jim Grant, NYISO

Mark Capano, NYISO

Chris Sharp, NYISO

Edward Schrom, DPS (Phone)

Wayne Sipperly, NYPA

Aaron Markham, NYISO (Phone / Partial)

Paul Gioia, Legal Counsel (Partial)

RRS Meeting # 200 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

The following additional Agenda Item was requested:

- 6.2 Black Start Testing Requirements
- 6.3 ETC Discussion
- 6.4 Restoration Training Requirements
- 6.5 GMD

2. Approval of Minutes / Action Items

2.1 Approval of RRS Minutes #199

RRS reviewed the Minutes from the last RRS meeting. Minor comments were provided to the Minutes and with these changes, Minutes are considered as final.

2.2 RRS Action Items List

Action Item 199-7: On agenda today and status is changed to complete.

Action Item 199-6: On agenda today and status is changed to complete.

Action Item 199-5: On agenda today and status is changed to complete.

Action Item 199-4: On agenda today and status is changed to complete.

Action Item 199-3: On agenda today and status is changed to complete. See discussion under Additional Agenda Item 6.4.

Action Item 199-2: On agenda today and status is changed to complete.

Action Item 199-1: On agenda today and status is changed to complete.

Action Item 198-4: On agenda today and status is changed to complete. See discussion under Additional Agenda Item 6.5.

Action Item 198-3: Completed. The NYSRC Procedure for NYCA Transmission Reviews was updated and is part of the NYSRC Reliability Rule and Compliance Manual, Version 36.

Action Item 197-8: On-going.

Action Item 197-5:

Mr. Paszek described a Fundamental Design Principle that is part of the Con Edison Transmission Planning Criteria. Fundamental Design Principle 1.13 states: *“New or re-powered generating projects proposing to interconnect to the Con Edison gas transmission system shall be designed, constructed, operated and tested in each capability Period so that they can automatically switch fuel from natural gas to liquid fuel whenever experiencing low system gas pressure or a loss of gas condition. Automatic switching shall occur at any dispatch level within 45 seconds of experiencing low gas pressure. The generators’ shall remain synchronized and return to their pre-gas disturbance dispatch levels in accordance with their ramp-rate. The new generation shall have the equipment required to perform fuel switching. The project shall ensure that such automatic fuel switching capability is operational as of the commercial operation date of the project.”*

Mr. Paszek stated that, based on internal Con Edison studies, Transmission Load Areas where Loss of Gas / Min Oil Burn issues exist are supplied exclusively by the Con Edison Gas System, therefore the Fundamental Design Principle 1.13 was written to address this existing issue. With changing system conditions the Fundamental Design Principle 1.13 could be adjusted to include other NYC transmission gas suppliers. Status of this Action Item is changed to Completed.

Action Item 195-6: On agenda today and status is changed to complete. See discussion under Additional Agenda Item 6.4.

Action Item 195-1: On-going.

Action Item 191-2: On-going.

Action Item 141-1: On-going.

Action Item 139-1: On-going.

Action Item 87-5: On-going.

Action Item 83-8: On-going.

3. NYSRC Reliability Rules Development

3.1 Outstanding PRR List

PRRs 120, 121, 122 received final NYSRC Executive Committee approval and they were incorporated in the latest revision of the NYSRC Reliability Rule and Compliance Manual, Version 36. PRR 128 is tabled pending NPCC A-10 revision. All other PRRs are on the table for today’s discussion.

3.1.1 PRR 130 D.1 Mitigation of Major Emergencies (Clarification of ETC application)

Mr. Clayton stated that there were two issues on the table: (1) Declaration of ETC, which was resolved at the last RRS meeting (with few lingering questions to be addressed by Aaron Markham at today's meeting) and (2) Disconnection between NYSRC Reliability Rules and what the NYISO actually does. Mr. Grant developed a PRR 130 that would address issue (2).

Mr. Hochberg requested that "system states" be changed to "System Operating States" due to an existing NYSRC Glossary Term. In addition, "emergency transfer criteria" will be capitalized as it is also a defined NYSRRC Glossary Term. Mr. Grant will update PRR 130 per comments received.

Action Item 200-1: Mr. Clayton will forward the updated PRR 130 for NYSRC Executive Committee approval to post for comment (i.e. forty-five (45) calendar days for comment).

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The following discussion – related to PRR 130 – occurred after Agenda Item 3.1.3
Mr. Aaron Markham joined RRS Meeting.

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Mr. Clayton asked Mr. Markham for a further explanation of the following statement made by Mr. Markham at the RRS 199: *"For a Stuck Breaker or Loss of Tower contingency, where a facility is projected to be above its STE rating, ETC will be declared but there is no time requirement to declare Major Emergency. For a single facility contingency, where a facility is projected to be above its STE rating, the NYISO declares ETC immediately. After 30 minutes of exceedance the NYISO will declare Major Emergency."*

Mr. Markham stated that the 30 minute time limitation is (was) an agreed upon time limitation that carried an acceptable risk. The Operator has 30 minutes to take remedial action. Mr. Clayton asked why not use the same 30 minute for a Stuck Breaker or Loss of Tower contingency? Mr. Markham's understanding is that when NPCC started requiring these contingencies to be respected, a discussion on risk took place, and it was decided that the Operator should not shed load for these lower probability contingencies. Mr. Clayton asked why than the NYISO wouldn't declare Major Emergency? Mr. Markham stated that the only additional action(s) that a Major Emergency would provide is to perform voltage reduction and/or load shed. Mr. Clayton stated that it would make sense to be able to declare a Major Emergency especially for a Stuck Breaker or Loss of Tower contingency (as it trips more elements than would a single contingency – by definition); then why not use it. Mr. Markham will get back to the RRS with the answer to this inquiry.

Action Item 200-5: Mr. Markham will craft a response to the question why the NYISO wouldn't declare Major Emergency for a Stuck Breaker or Loss of Tower contingency.

Mr. Clayton also asked Mr. Markham for a further explanation / confirmation of the following statement made by Mr. Markham at the RRS 199: *"The NYISO stated that there are some cases where you may be in an unsecured state for a few minutes, and that due to a load cycle, are back into an unsecured state. No need to go back and forth with declaring ETC."*

Mr. Markham stated that the NYISO may not terminate the ETC knowing that, with a load cycle, the condition may/will appear again. Mr. Hochberg asked Mr. Markham could a scenario occur where the condition does not reappear thus the ETC was kept without the need for it. Mr. Markham stated that this has actually occurred on the system in the past.

3.1.2 PRR 131 I.6 Modeling & Data (Dual fuel testing requirements)

Mr. Paszek provided a short description of this PRR and what changes have been applied since the last RRS meeting. Mr. Shanahan asked what the "significant failure rate" referred to in Section 4 of this PRR. Mr. Paszek responded that it referred to an approximate 10% failure rate of one type of a unit. Mr. Grant raised a discomfort with the application of this PRR to the 'rest of state' generating units (outside of NYC and LI), as there are currently no requirements as it relates to the "Loss of Gas". Mr. Paszek responded that this PRR is forward looking and the "Loss of Gas" issue could become a future issue for 'rest of state' transmission system. Mr. Gioia seconded Mr. Grant's concerns stating that there could be a large opposition to this new PRR due to applicability of this PRR to the 'rest of state' generating units (i.e. additional costs), and that we should reach out to the Generator Sector. Mr. Paszek stated that, based on the prior RRS' discussion, the plan is for this group to agree on a 'workable PRR' to be forwarded to the Generator Sector for their input.

Mr. Clayton asked why 'rest of state' generating units would have dual fuel capability. Mr. Schrom stated that some of the PSC's Article 10 stipulations require dual fuel capability; applicable to all new NYCA generating units. Mr. Clayton stated that Article 10 requirements were obviously added due to system reliability. Mr. Schrom confirmed Mr. Clayton's understanding is correct. However, upon further discussion, it was noted that PSC's Article 10 does not stipulate testing requirements. The group decided to proceed with this PRR being applicable to all NYCA generating units.

Mr. Shanahan provided few additional editorial comments to Section 4 of the PRR which were accepted by the group.

Mr. Shanahan provided additional comments toward R4: (1) to replace the word “immediate” with “promptly” in the existing proposal or (2) re-write the existing proposal to state: *“If a dual test is not successful, the Generator Owner shall promptly correct the cause of the failure and demonstrate a successful retest.”* The proposal to replace the word “immediate” with “promptly” has been accepted. However, both these options dropped a requirement to keep the NYISO informed as to the progress of the repairs. Mr. Paszek stated that this requirement is a very important feature that would help maintain the dual fuel capability – the NYISO needs to know when the dual fuel capability issues would be addressed by the Generator Owner. Mr. Grant seconded Mr. Paszek stating that, for example, the NYISO is in communication with Generator Owners as it relates to VSS and DMNC testing. Mr. Shanahan objection has been noted and the group chose not to remove the requirement to keep the NYISO informed as to the progress of dual fuel repairs.

Mr. Gioia suggested a change in R4 to replace the word “repair” with “remedial action”, which subsequently was accepted by the group.

Mr. Adamson provided additional minor edits to the Measurement Section of this PRR which were accepted by the group.

Action Item 200-2: Mr. Paszek to re-write, per comments received, PRR 131 Modeling & Data (Duel Fuel Testing).

Action Item 200-3: Mr. Clayton to forward PRR 131 Modeling & Data (Duel Fuel Testing) to the representatives from the Generator Sector.

Mr. Hochberg stated that NYPA needs to also understand cost implications of this proposed PRR before proceeding with its implementation. Mr. Grant stated that this would be addressed as part of PRR 131 implementation plan and through the discussions at the NYISO committees. Mr. Sharp stated that it would be beneficial to have some discussions on this issue before RRS sends this PRR to the NYSRC Executive Committee, and that having the Generator Sector exposed to this PRR would open this discussion (as the Generator Sector may identify additional costs required satisfying this PRR).

3.1.3 PRR 132 I.4, Transmission Data (Clarification of Material error)

Mr. Clayton provided a short description of this PRR and what changes have been applied since the last RRS meeting. The PRR addresses two directives from NYSRC EC: 1) to clearly and objectively identify non-compliant data error submission; and 2) to consider any other modifications the RRS deems necessary.

Mr. Adamson provided a clarification to R.1.3 that it should not only require reporting the data error but it should also correct the data error. In addition, Mr. Adamson suggested order change of sub-requirements R1.3 and R1.4. These changes have been accepted by the group.

Mr. Gioia questioned the need for the following phrase from R1.7 “[...] *after the data error was used in planning or operating studies*”. Mr. Clayton stated that this is “no harm / no foul” issue, meaning that if it was not used in the study than there shouldn’t be even an assessment of the impact of such data error. Mr. Gioia disagreed. Mr. Paszek provided an example where a data was provided on Monday, but subsequently an error was caught and corrected on Tuesday, than there shouldn’t be even an assessment of the impact of such data error. Mr. Gioia disagreed and called this example of non-compliance (a violation). Mr. Paszek disagreed, stating that on top of the above exception we are defining what constitutes a material impact. Mr. Gioia stated that the expectation is to provide accurate data – period – and whether it was actually relied on is not the point. Mr. Grant stated that the following “[...] *after the data error was used in planning or operating studies*” provided the NYISO with a flexibility toward assessing the material impact. Mr. Gioia conceded to keep this statement in the R1.7.

Mr. Pfleiderer asked why R1.7 makes a reference to planning studies, in addition to operating studies, if the same requirement requires an assessment within the current capability period (which would correspond to operating studies). Mr. Grant stated that planning studies are started in each capability period, and thus the reference is applicable.

Mr. Gioia also questioned the need for the following statement: “*The NYISO Assessment identifies a reliability violation on the NYS Bulk Power System within the current Capability Year.*” Mr. Paszek stated that a definition of Material Impact needs to be part of the NYSRC RR. The NYISO stated that they would propose a revision as follows: “*The NYISO assessment identifies a reliability violation on the NYS Bulk Power System, or the conclusions of a NYISO planning or operating study change as a result of the data error.*” Mr. Gioia asked if this definition would identify the issue that drove the need for this PRR. Mr. Sharp responded stating Yes, as that issue would change conclusions of NYISO’s Study. The group agreed to adopt NYISO’s language.

The phrase “engineering judgment” has been removed from R1.7, however it is understood that the NYISO will utilize engineering judgment while performing the required assessment under R1.7. In addition, under R1.7 the phrase “*reliability violation*” has been proposed to be replaced with “*does not meet the reliability criteria*” – tabled until next RRS meeting.

Action Item 200-5: Mr. Clayton to re-write, per comments received, PRR 132 I.4, Transmission Data.

3.2. Discussion Items

3.2.1 RR Section B: Transmission Planning Introduction revision

Mr. Adamson provided a short description of the proposed changes applied to the NYSRC Reliability Rules and Compliance Introduction sections – Section B; Transmission Planning and Section C: Transmission Operations.

Mr. DePugh commented that the proposed Transmission Planning Horizon(s), Near-Term and Long-Term, would not match the current NPCC and NYSRC requirements toward the conduct of the Annual Transmission Review (i.e. 4-6 year, the NYISO performs year 5).

Mr. Grant stated that RRS decided to have these definitions as a consequence of discussion toward the applicability of the Exceptions to the NYSRC Reliability Rule.

Mr. Hochberg stated that RRS does not have to follow the exact NERC Planning Horizon definitions (which were used as the base for these revisions). However, the definition needs to be clear for an outside entity to understand which rules are applicable to which study. The group decided to have a sentence that could state: These rules are generally applicable to time periods greater than one year (Planning) or less than one year (Operations).

Action Item 200-6: Mr. Adamson to re-write, per comments received, revisions to Introductions to NYSRC RR&CM Section B: Transmission Planning and NYSRC RR&CM Section C: Transmission Operations.

3.2.2 RR Section C: Transmission Operation Introduction revision

See Discussion under Agenda Item 3.2.1.

3.2.3 Exceptions to Reliability Rules revision

Mr. Clayton stated that Exception #4 to the NYSRC Reliability Rules has been rescinded by NYSRC Executive Committee per RRS recommendation.

Mr. Clayton stated that the NYISO has identified a number of Exceptions that, in the NYISO's view, should be applicable not only to C.1 *Transmission Operations* but also to B.1 *Transmission Planning*. The following Exceptions were identified by the NYISO: 1, 2, 3, 4 (rescinded), 5, 6, 10, 11, 12, 13, and 23. Mr. Paszek provided an errata change to Exception #20: the reference "A2253" should be removed from the title of that Exception. The group agreed to do so.

After a short discussion, where the group reviewed all exceptions one-by-one, the applicability to B.1 *Transmission Planning* was added to the following Exceptions: #5, #6, #10, #11, #12, #13, and #23. The applicability to B.1 *Transmission Planning* was NOT added to Exception #1, #2 and #3. The Transmission Owner of each Exception Ok's the change to the applicability of its Exception to the NYSRC Reliability Rules.

Mr. Hochberg requested the NYISO to identify the utilization of these exceptions in the NYISO Planning and Operating Studies (for example: The limit is 'x' based on the utilization of Exception '#y'). Mr. Pfleiderer seconded this proposal.

Action Item 200-7: NYISO to provided recommendation to add the applicability of B.1 *Transmission Planning* to the following Exceptions: #5, #6, #10, #11, #12, #13, and #23. The recommendation shall be in an e-mail format with a copy to NYPA and National Grid. NYPA and National Grid are asked to respond with an agreement with the NYISO recommendation (no objection).

Action Item 200-8: NYISO to modify applicable Planning and Operating Manuals to add language toward the utilization of the Exceptions of the NYSRC Reliability Rules.

3.3 Bucket List

There is nothing new to report.

4. NPCC Directories

Mr. Grant stated that NPCC had set up a working group toward Directories 9 and 10 due to the NERC MOD-025 Standard *Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive Power Capability*. Mr. Grant stated that the group should shortly expect a position paper from NPCC toward the removal of Directions 9 and 10, as MOD-025 is more specific and stringent than these Directories.

5. NERC SARS/Organization Standards

5.1 NERC Standard Tracking

Mr. Paszek commented that line item “Real-time Reliability Monitoring & Analysis Capabilities (IRO-018-1, **TOP-012-2**)” should state “Real-time Reliability Monitoring & Analysis Capabilities (IRO-018-1, **TOP-010-1**)”.

6. Additional Agenda Items

6.1 REV potential impact on NYS BPS reliability

Mr. Clayton stated that he informed the NYSRC Executive Committee of the ISO-NE study toward *Impact of Distributive Generation on the Reliability of the Transmission System*. At the NYSRC Executive Committee the NYISO reported that the NYISO is already performing such a study.

Mr. Clayton also recommended that RRS should develop a statement that would encompass the following thought: “Whatever the REV does it will not adversely impact Transmission System Reliability”. The NYSRC Executive Committee position was that this is given and no further action is necessary.

6.2 Black Start Testing Requirements

Mr. Paszek provided a short description of the issues where it appears that the NYSRC Reliability Rules, related to Black Start Testing, are less stringent and specific than NERC EOP-005 and NPCC Directory 8. Mr. Grant stated that a similar comparison has already been done for Restoration Training, and suggested that that comparison could be expanded for Black Start Testing.

Action Item 200-9: NYISO to forward the latest revision of the comparison of Restoration Training Requirements. Mr. Paszek will add a comparison of NERC Standard EOP-005, NPCC Directory 8 and NYSRC Reliability Rules as they relate to Black Start Testing Requirements.

Mr. Grant raised an issue toward possibility of removing a section of the NYSRC Reliability Rules, as it relates to Restoration Training (or Sections of) and possibly GMD (or Sections of). Mr. Clayton seconded this stating that the NYSRC already has precedence where a section toward Relay Protection was removed from the Reliability Rules.

6.3 ETC Discussion

See Discussion under Agenda Item 3.1.1.

6.4 Restoration Training Requirements

This item is tabled until next RRS meeting. See short Discussion on this item under Agenda Item 6.2.

6.5 GMD

This item is tabled until next RRS meeting.

7. Reports

7.1 NYSRC EC Meeting Report

Mr. Clayton thanked RRS for the 2015 Report on RRS Highlights.

7.2 NYSRC ICS Meeting Report

The ICS is developing models toward 2017 IRM study.

Meeting ended at 1:50 PM.

Next Meeting #201

Thursday, May 5, 2016; 9:30 am @ NYSERDA, 17 Columbia Circle, Albany