

| NERC Violation ID | Reliability Standard | Req. | Violation Risk Factor | Violation Severity Level | Violation Start Date | Violation End Date | Method of Discovery | Mitigation Completion Date | Date Regional Entity Verified Completion of Mitigation |
|--|----------------------|------|---|--------------------------|----------------------|--------------------|---------------------|----------------------------|--|
| FRCC2018020484 | BAL-001-2 | R2. | Medium | Lower | 9/24/2018 | 9/24/2018 | Self-Report | 2/21/2019 | 3/13/2019 |
| Description of the Violation (For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible or confirmed violation.) | | | <p>On October 4, 2018, HST submitted a Self-Report stating that, as a Balancing Authority, it was in violation of BAL-001-2 R2.</p> <p>This violation started on September 24, 2018, when HST's Balancing Authority ACE Limit (BAAL) High alarm exceeded 30 consecutive minutes and ended on September 24, 2018, when BAAL returned to within limits after one additional minute.</p> <p>HST exceeded the BAAL high limit for 31 consecutive minutes (one (1) minute beyond the allowable 30 consecutive clock-minutes), over-generating by approximately eight (8) MWs during this period.</p> <p>The System Operator was monitoring the BAAL High Limit Exceeded Alarms on the Alarm Summary, which were occurring every five (5) minutes as designed. The System Operator's relative inexperience (< 1 year) and a series of prior alarms received earlier in the morning that cleared by themselves, resulted in the operator expecting the BAAL High Limit exceedance to return within limits without taking any additional actions, such as curtailing transactions, as required by HST's BAAL Alarm procedure.</p> <p>The System Operator adjusted the next hour schedule lower. The BAAL high limit exceedance cleared at 08:02, for a total of 31 minutes.</p> <p>The cause for this violation was the System Operator's misjudgment and relative inexperience (< 1 year) paired with a lack of management oversight.</p> | | | | | | |
| Risk Assessment | | | <p>This violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system.</p> <p>HST's failure to take actions and bring the BAAL back within limits could lead to further high frequency excursion with the over-generation and cause neighboring BA entities to unnecessarily reduce generation, impacting the potential stability of the BPS.</p> <p>This risk was reduced because HST only exceeded the BAAL High limit by one (1) minute and the excursion was only for eight (8) MWs during this period. HST's 107 MW system is less than 0.2% of the FRCC Region summer load.</p> <p>No harm is known to have occurred.</p> | | | | | | |
| Mitigation | | | <p>To mitigate this violation, HST:</p> <ol style="list-style-type: none"> 1) identified the issue and provided reinforcement training to the involved System Operator; 2) provided the System Operator a written performance letter, emphasizing the importance of taking action on BAAL alarms, especially at the 20 minute alarm and greater; 3) performed an extent-of-condition review to check for other occurrences since the quarterly review and no additional instances were found; 4) created a cause and effect diagram and performed root cause analysis; 5) revised the BAAL Alarm Procedure and updated to include actions to be taken with the addition of HST generation now back on line, in addition to current transaction curtailment; BAAL procedure revision version 7; 6) completed training on the revised BAAL procedure version 7 for all System Operators; 7) executed revised BAAL procedure, version 8, to clarify System Operators required actions and to provide for the inclusion of additional preventative controls. Additional preventative controls include: <ol style="list-style-type: none"> a. Starting the use of the check list when the alarms first start to occur, b. Modifying the check list to allow the System Operator to record the date/time for actions taken as well as a section for related comments, c. Requiring completion of the check list by the System Operator at the 20 minute mark and greater, d. Providing for management review of completed check lists with feedback to the System Operator to improve future responses to alarms, 8) provided reinforcement training on the revised BAAL Alarm procedure, version 8, and revised check list to all applicable System Operators; 9) started exporting BAAL supervisory control and data acquisition (SCADA) alarms to key personnel once the first alarm occurs after 10 minutes, followed by subsequent alarm notifications after 15, 20, 25, 26, 27, 28, and 29 minutes. These notifications include the Sr. Manager of System Operations, Senior System Operator, Assistant Director, Director, and others as designated by the Director. The designated additional personnel will contact the System Operator to discuss required actions needed to bring the BAAL within NERC specifications. | | | | | | |
| Other Factors | | | <p>This instant issue is a repeat of FRCC2016015952 and FRCC2017018469, which are considered an aggravating factor. Since the enforcement date of July 1, 2016, HST has violated this standard on several occasions. After each instance management has put additional safeguards in place; however, these actions have been insufficient to correct the situation and management oversight was considered an aggravating factor. The Internal Compliance Program was considered a neutral factor and no credit was granted as the program has not corrected the issue. Minimal credit was granted for the Self-Report and cooperation.</p> | | | | | | |

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| NPCC2018019020 | IRO-010-2 | R3 | Medium | Lower | 10/9/17 | 10/10/17 | Self-Report | 2/28/2018 | 1/11/2019 |
| Description of the Violation (For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, or confirmed violation.) | | | <p>On January 23, 2018, Consolidated Edison Co. of NY, Inc. (CECONY) submitted a Self-Report stating that, as a Transmission Owner (TO), it was in violation of IRO-010-2 R3. CECONY did not use the mutually agreed format between itself and its Reliability Coordinator (NYISO) for data specifications related to NYISO's Real-Time monitoring.</p> <p>Specifically, CECONY failed to observe the NYISO's communication protocol and provision of Real Time data protocol associated with the scheduled derate of two 345 kV Transmission Facilities: Feeders 41 and 42. CECONY scheduled the derates for pipe-type Underground Feeders 41 and 42 (associated with Feeder 41 and 42 cooling plant work) in advance through the NYISO outage scheduling process for the derates to begin at 7:00 am on October 9, 2017. However, and in violation of CECONY's internal procedure, substation field personnel made status changes to the cooling plant at 11:21 am on October 9, 2017 without asking permission from the CECONY System Operator. As a result, both feeders were derated in Real Time to a Summer Normal rating of 554 MW without the knowledge of the CECONY System Operator or the NYISO. The CECONY EMS carried an incorrect Summer Normal Rating of 649 MW for both Feeders. The CECONY EMS communicates via ICCP with the NYISO EMS. The NYISO's protocol associated with Real Time monitoring required CECONY's System Operator to contact the NYISO via phone prior to the scheduled start time to acquire an additional verbal approval for the scheduled derates to begin. Only upon NYISO's approval would the CECONY System Operator have normally changed both Feeder ratings in the EMS and provided permission to the CECONY substation field personnel to begin the cooling plant work.</p> <p>The violation started at 11:21 am on October 9, 2017, when substation personnel made the cooling plant adjustments that began the derates, and ended at 5:33 pm on October 10, 2017 when the CECONY System Operator notified the NYISO of the derates and adjusted the Summer Normal ratings in the EMS.</p> <p>The root cause of this violation was the failure of the CECONY substation working group to follow internal protocol to acquire approval from the System Operator before scheduled work began at a substation that affects equipment ratings.</p> | | | | | | |
| Risk Assessment | | | <p>This violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system.</p> <p>The existence of incorrect ratings in the EMS could negatively impact the reliability of the BPS under stressed system conditions if the operating authority is unknowingly operating to a higher rating than the equipment can accommodate. In this case, however, pre-outage studies were performed by CECONY and the NYISO as part of the NYISO's scheduling and approval process. The scheduling process allows the opportunity for the CECONY or NYISO to study and possibly deny the outage request one week in advance and then an opportunity to study again and possibly deny the outages as the October 9, 2017 operational day was beginning. On October 9, 2017, the NYISO and/or CECONY System Operator would have cancelled the job before the scheduled 7:00 am start time had system conditions warranted such cancellation. At no time during the approximate 30-hour duration of the violation did the system configuration change to cause an increase in loading on either feeder that exceeded the 554 MW reduced ratings.</p> <p>No harm is known to have occurred.</p> | | | | | | |
| Mitigation | | | <p>To mitigate this violation, CECONY:</p> <ol style="list-style-type: none"> 1) Conducted an Operating Incident investigation upon the discovery of the violation through CECONY's Substation Operations and System Operations staff; 2) Provided additional training to its Substation Shift Managers and operators on the derate notification and approval process and its importance to the reliability of the Bulk Power System; 3) Directed the Substation Planner responsible for making future outage requests for scheduled dielectric cooling plant work at substations to add a distinct notification step to the System Operator outage switching card; and 4) Updated its Substation procedure 0900-0002 – <i>Operation and Maintenance of High Pressure Dielectric Fluid Cooling Plants (PURS)</i> - with the documentation of the requirement to request approval from the System Operator before cooling plant work begins. | | | | | | |
| Other Factors | | | <p>NPCC reviewed CECONY's internal compliance program (ICP) and considered it to be a mitigating factor in the penalty determination. CECONY's ICP is documented in procedure TP-7560-18 <i>Management of the Compliance Process for NERC and NPCC Reliability Standards</i>. CECONY's internal compliance function is managed by the NERC Reliability Compliance Section (NRC). The NRC Section consists of a manager and a staff of six engineers. The function of the NRC Section is to manage the NERC compliance process for CECONY. Through its ICP, the NRC Section has identified all NERC Standards applicable to CECONY and assigned each to the appropriate corporate organization. The NRC Section manages the NERC CMEP for CECONY and is responsible for the submittal of all required periodic documentation such as guided self-certification evidence and forms. The NRC Section also coordinates audit responses to NPCC. The NRC Section manages a documented process</p> | | | | | | |

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| | <p>for evaluating issues of possible noncompliance. As part of the ICP, the NRC Section maintains archives of CECONY compliance documentation. The NRC Section actively participates in the NERC and NPCC Standards development process and represents Con Edison on the NPCC Compliance Committee and Regional Standards Committee.</p> <p>In recognition of its extensive ICP and robust culture of compliance, CECONY was qualified for self-logging by NPCC in 2016. As a self-logging entity, CECONY has demonstrated its ability to identify, assess and correct issues of possible noncompliance. CECONY has effectively implemented its self-logging authority and has limited its use of self-logging to instances of minimal risk noncompliance.</p> <p>NPCC considered CECONY's compliance history and determined there were no relevant instances of noncompliance.</p> |
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| NPCC2018019446 | FAC-009-1 | R1 | Medium | Moderate | 6/18/2007 | 1/30/2018 | Self-Report | 12/26/2018 | 1/10/2019 |
| Description of the Violation (For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, or confirmed violation.) | | | <p>On March 28, 2018, Consolidated Edison Co. of NY, Inc. (CECONY) submitted a Self-Report stating that, as a Transmission Owner (TO), it was in violation of FAC-008-3 R6. CECONY did not establish Facility Ratings consistent with its Facility Rating Methodology (FRM) for nine Facilities. NPCC later determined that the violation began under FAC-009-1 R1. Accordingly, NPCC determined that CECONY was in violation of FAC-009-1 R1 from June 18, 2007 until December 31, 2012 and then was in violation of FAC-008-3 R6 from January 1, 2013 until January 30, 2018. NPCC further determined that, for purposes of this violation, there was no substantive change in CECONY's compliance obligations under the two applicable Standard Requirements.</p> <p>CECONY's FRM requires the use of the most-limiting element (MLE) as the Facility Rating for its Facilities. CECONY initially discovered this violation through an on-watch System Operator who discovered that the ratings used in CECONY's Energy Management System (EMS) for two Bulk Electric System (BES) feeders that utilized the Dynamic Feeder Ratings (DFR) system did not respect the most limiting element of the feeders. Subsequently, the issue was determined to be with the DFR feeders and CECONY performed an extent of condition review on all 24 DFR feeders and discovered this violation affected nine (9) of its twenty-four (24) BES pipe type fluid filled transmission feeders that utilize the DFR system. CECONY has a total of 175 BES transmission feeders. The other 151 transmission feeders do not utilize the DFR system. These 9 feeders represent 5.1% (9/175) of CECONY's BES feeders. The DFR is an advanced software tool that allows for greater real-time operational flexibility by calculating real-time Facility Ratings exclusively for underground transmission cable portion of the feeder by considering the load history and dielectric fluid temperature during real-time operation and then automatically uploads the Facility Ratings into CECONY's EMS. There are 3 different modes of dielectric fluid circulation through the pipe type fluid filled feeders and the DFR calculates a Normal, LTE, and STE rating on the cable portion for each mode, and then also considers the Summer and Winter ratings of all series connected equipment. As a result, there are 18 different ratings possible for each feeder. In the case of these 9 feeders, the Facility Rating being used by the EMS that had been calculated by the DFR did not take into account that certain disconnect switches were the most limiting in-series piece of equipment or MLE either under certain pumping mode scenarios or due to recent loading history on the feeder. The noncompliant Facilities consisted of six 345 kV transmission feeders and three 138 kV transmission feeders, all of which are located within CECONY's New York City Transmission Load Area.</p> <p>This violation started on June 18, 2007, the enforcement date of the standard and requirement and ended on January 30, 2018, when CECONY suspended use of the DFR pending the completion of an extent of condition. In lieu of the DFR, CECONY reverted back to using the book value ratings in the EMS.</p> <p>The root cause of this violation is inadequate oversight and controls over the coordination between the DFR software and the Energy Control Center (ECC) SCADA server. Prior to FAC-009-1 coming into effect in 2007, CECONY had a facility ratings methodology that followed the accepted utility practices of the time. After the effective date of FAC-009-1, CECONY's methodology for establishing feeder ratings included identifying the most limiting element. However, CECONY did not ensure that the pre-2007 Facility Ratings calculated by DFR software respected the MLE and that that correct ratings were displayed on the SCADA system to the System Operator.</p> | | | | | | |
| Risk Assessment | | | <p>This violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system.</p> <p>The use of the inaccurate DFR ratings in the EMS could affect the reliability of the BPS under stressed real-time system conditions if the operating authority is unknowingly operating to a higher rating than the equipment can accommodate. Advance planning studies that involved these 24 feeders that have DFR was performed using the more conservative book ratings, not the dynamic rating.</p> <ul style="list-style-type: none"> The three 138 kV feeders became BES elements on 7/1/2016. The historical data for 2016 and 2017 shows that, for the majority of hours where any rating exceeded the MLE, the only rating that exceeded MLE was the Short Term Emergency (STE) rating. There were minimal instances where the EMS had an inaccurate rating for the Long Term Emergency (LTE) and NORMAL ratings. In Real-Time, there were no occurrences where power flows exceeded any of the rating levels (NORMAL, LTE, STE) that should have shown in the EMS had the MLE been properly considered in developing the Facility Rating. The six 345 kV feeders became BES elements on 6/18/2007. The historical data for 2010 through 2017 shows that, for the majority of hours where any rating exceeded the MLE, the only rating that was inaccurate was the Short Term Emergency (STE) rating. There were minimal instances where the EMS had an inaccurate rating for the LTE and NORMAL ratings. In real time, there were no occurrences where power flows exceeded any of the rating levels (NORMAL, LTE, STE) that should have shown in the EMS had the MLE been properly considered in developing the Facility Rating. <p>However, the risk of this noncompliance was reduced by the following factors:</p> <ol style="list-style-type: none"> CECONY operates the transmission system on an N-2 basis secured to NORMAL ratings. The violation consisted, largely, of the EMS showing an incorrect STE Rating to the Operator, which are rarely reached even after a contingency occurs. The CECONY methodology for operating the power system keeps real time power system flows under the NORMAL rating under normal operating conditions and obligates the System Operator to return facilities back to under NORMAL ratings in response to any contingency as soon as possible. The methodology also does not allow for an STE contingency alarm that results from the Real Time Contingency Analysis program to remain; the System Operator must adjust the system immediately to clear the STE contingency alarm. When real-time issues occur, the CECONY System Operator operates in a conservative fashion to prolong the life of BES elements. The System Operator must clear an Over Normal alarm within 3 hours instead of the Planning allowance of 24 hours. The System Operator must clear an Over LTE alarm within 15 minutes instead of the Planning allowance of 3 hours. The System Operator must clear an Over STE alarm within 5 minutes instead of the Planning allowance of 15 minutes. | | | | | | |

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| NPCC2018019446 | FAC-009-1 | R1 | Medium | Moderate | 6/18/2007 | 1/30/2018 | Self-Report | 12/26/2018 | 1/10/2019 |
| | | | 5) Based on a review of historical data, there were no instances during the period of noncompliance where the nine feeders experienced real time flows that exceeded any of the corrected ratings level (Normal, LTE, STE) of the MLE. No harm is known to have occurred. | | | | | | |
| Mitigation | | | To mitigate this violation, CECONY: <ol style="list-style-type: none"> 1) Suspended the use of its DFR tool and began using the book ratings from the Engineering department and performed an extent of condition review; 2) Implemented and tested equipment book rating limits for all series transmission equipment in its EMS system for all DFR-rated feeders in accordance with its documented FRM 3) Enhanced the coordination between the DFR server and ECC SCADA server so that the ECC SCADA server provides the most limiting series element rating to the EMS for the Operator’s use. | | | | | | |
| Other Factors | | | <p>Although this was a minimal risk issue, NPCC aggravated this violation to an SNOP with a penalty. FAC-008-3 R6 has been identified as an area of focus in the ERO Enterprise CMEP Implementation Plans from 2016 through 2019. For a large TO such as CECONY, it is expected that Facility Ratings discrepancies be identified and addressed through detective controls and not discovered as part of another capital project or incidentally by an on-watch system operator.</p> <p>Additionally, NPCC reviewed CECONY’s internal compliance program (ICP) and considered it to be a mitigating factor in the penalty determination. CECONY’s ICP is documented in procedure TP-7560-18 <i>Management of the Compliance Process for NERC and NPCC Reliability Standards</i>. CECONY's internal compliance function is managed by the NERC Reliability Compliance Section (NRC). The NRC Section consists of a manager and a staff of six engineers. The function of the NRC Section is to manage the NERC compliance process for CECONY. Through its ICP, the NRC Section has identified all NERC Standards applicable to CECONY and assigned each to the appropriate corporate organization. The NRC Section manages the NERC CMEP for CECONY and is responsible for the submittal of all required periodic documentation such as guided self-certification evidence and forms. The NRC Section also coordinates audit responses to NPCC. The NRC Section manages a documented process for evaluating issues of possible non-compliance. As part of the ICP, the NRC Section maintains archives of CECONY compliance documentation. The NRC Section actively participates in the NERC and NPCC Standards development process and represents Con Edison on the NPCC Compliance Committee and Regional Standards Committee.</p> <p>In recognition of its extensive ICP and robust culture of compliance, CECONY was qualified for self-logging by NPCC in 2016. As a self-logging entity, CECONY has demonstrated its ability to identify, assess and correct issues of possible noncompliance. CECONY has effectively implemented its self-logging authority and has limited its use of self-logging to minimal risk noncompliance.</p> <p>The violation duration was 3,879 days. CECONY did not have any detective controls in place that could have helped identify the issue sooner to lessen the violation duration and thereby lessen the risk.</p> <p>NPCC considered CECONY’s compliance history and determined there were no relevant instances of noncompliance.</p> | | | | | | |

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| NPCC2018020745 | FAC-008-3 | R6 | Medium | Lower | 7/1/2016 | 11/9/2018 | Self-Report | 11/15/2018 | 1/11/2019 |
| <p>Description of the Violation (For purposes of this document, each violation at issue is described as a “violation,” regardless of its procedural posture and whether it was a possible, or confirmed violation.)</p> <p>On November 30, 2018, Consolidated Edison Co. of NY, Inc. (CECONY) submitted a Self-Report stating that, as a Transmission Owner (TO), it was in violation of FAC-008-3 R6. CECONY did not establish Facility Ratings consistent with its Facility Rating Methodology (FRM) for eight Facilities.</p> <p>CECONY’s FRM requires the use of the most-limiting element (MLE) as the Facility Rating for its Facilities. CECONY initially discovered this violation as part of the planning for a capital project to replace 138 kV disconnect switches when it discovered the thermal ratings of a 138 kV intra-substation feeder did not respect the most MLE of the Facility. CECONY performed an extent of condition review and discovered this violation affected eight (8) of its one hundred and fifty-one (151) BES transmission feeders that are non-DFR feeders. CECONY has a total of 175 BES transmission feeders with 24 of them being in the DFR system. In the case of these 8 feeders that represent 4.6% of CECONY’s BES feeders, the Facility Rating did not respect the most limiting in-series piece of equipment or MLE. The noncompliant Facilities consisted of two 345 kV transmission feeders and six 138 kV transmission feeders, all of which are located within CECONY’s New York City Transmission Load Area and all of which became BES elements on July 1, 2016.</p> <p>This violation started on July 1, 2016, the date when all eight Facilities were identified as BES Elements under the revised Bulk Electric System definition and ended on November 9, 2018, when CECONY corrected the Facility Ratings to be consistent with its FRM for all eight feeders. In particular, CECONY corrected the ratings for the eight Facilities in its "Tie Feeder Rating Tabulation" (a.k.a the “book” rating) that is developed by Transmission Engineering and entered the correct ratings into its EMS/SCADA system.</p> <p>Since the time that NERC standards came into effect in 2007, CECONY has had a mature methodology for establishing facility ratings that included identifying the MLE. However, a review of the ratings of the newly identified BES elements conducted prior to the effective date of the BES definition (7/1/2016) was not fully effective. These are all non-DFR feeders. The root cause of this violation is that CECONY’s verification of the ratings of new BES transmission elements was not fully effective prior to providing the ratings to the System Operation Department.</p> <p>The eight feeders are not part of CECONY’s Dynamic Feeder Rating (DFR) software and thus, were not part of the review that took place under NPCC2018019446, FAC-009-1 R1.</p> | | | | | | | | | |
| <p>Risk Assessment</p> <p>This violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system.</p> <p>The use of incorrect book ratings in the EMS could affect the reliability of the BPS under stressed system conditions if the operating authority is unknowingly operating to a higher rating than the equipment can accommodate. Planning and operating studies depend on the use of accurate book ratings such that the BES can withstand a variety of predetermined contingencies.</p> <p>All eight of the feeders (2 - 345 kV and 6 – 138 kV) became BES elements on July 1, 2016.</p> <p>The first 345 kV feeder has three modes of dielectric fluid circulation and CECONY develops three different ratings (Normal, LTE, STE) for both the summer and winter period. As a result, the 345 kV feeder had 18 different possible ratings levels. The only rating of the 18 that was incorrect was the Summer STE rating. In addition, the feeder is operated in series with another 345 kV feeder that was rated correctly and that was more limiting than the 345 kV feeder with the ratings issue. However, both of those 345 kV feeders were monitored by the System Operator and had alarms points for flows (Normal, LTE, STE) in the EMS. As such, there was no operational risk because the System Operator would have seen, and reacted to, the EMS alarms on the more limiting feeder first.</p> <p>The second 345 feeder served the high side of a 345/138 kV autotransformer and does not have circulating dielectric fluid. It was discovered that all six ratings (Normal, LTE, STE for Summer and Winter) on the 345 kV feeder needed adjustment to take into account that the 345 kV side of the autotransformer was limiting. The Summer Normal rating was 28% higher than the correct Summer Normal rating. However, the 138 kV feeders on the low side of the autotransformer had the correct ratings, were more limiting than the 345 kV feeder, and were equal to the rating of the low side of the transformer. The 138 kV feeders also had alarm points for flows (Normal, LTE, STE for Summer and Winter) in the EMS. As such, there was no operational risk because the System Operator would have seen, and reacted to, the EMS alarms on the more limiting feeders first.</p> <p>With regard to the six 138 kV feeders:</p> <ul style="list-style-type: none"> • The initial discovery of the limiting disconnect switch that led to the CECONY extent of condition review resulted in the corrected ratings for one intra-substation 138 kV feeder for all six ratings (Normal, LTE, STE for both Summer and Winter). The Summer Normal rating was 36% higher than the correct Summer Normal rating. • One 138 kV feeder has two modes of dielectric fluid circulation and has a switchable reactor connected to it. The feeder has 24 possible different ratings and only the Winter STE rating was incorrect in one mode. The other 23 ratings were correct. • By the strict implementation of the CECONY ratings methodology, four electrically equivalent and parallel 138 kV BES feeders needed the Summer and Winter Normal ratings adjusted due to the discovery that the high side transformer winding on each corresponding 138 kV to 69 kV transformer was incorrect. These four feeders serve a radial 69 kV load area. The Summer Normal rating | | | | | | | | | |

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| | <p>was 16% higher than the correct Summer Normal rating. The transformer is the limiting series element in all cases; however, the 4 transformers are non-BES elements. The other four ratings (LTE and STE for both Summer and Winter) did not change on all 4 feeders.</p> <p>However, the risk of this noncompliance was lessened by the following factors:</p> <ol style="list-style-type: none"> 1) CECONY operates the transmission system to an N-2 basis secured to Normal ratings. 2) The CECONY methodology for operating the power system keeps real time power system flows under the NORMAL rating under normal operating conditions and obligates the System Operator to return facilities back to under NORMAL ratings in response to any contingency as soon as possible. The methodology also does not allow for an STE contingency alarm that results from the Real Time Contingency Analysis program to remain; the System Operator must adjust the system immediately to clear the STE contingency alarm. 3) When real-time issues occur, the CECONY System Operator operates in a conservative fashion to prolong the life of BES elements. The System Operator must clear an Over Normal alarm within 3 hours instead of the Planning allowance of 24 hours. The System Operator must clear an LTE alarm within 15 minutes instead of the Planning allowance of 3 hours. The System Operator must clear an STE alarm within 5 minutes instead of the Planning allowance of 15 minutes. 4) None of the four parallel 138 kV BES feeders were ever operated over the rating of the BES cable portion. It was only the non-BES 138/69 kV series transformers that were exposed to the incorrect ratings. <p>No harm is known to have occurred.</p> |
| Mitigation | <p>To mitigate this violation, CECONY:</p> <ol style="list-style-type: none"> 1) Performed an extent of condition review on all non-DFR BES transmission Facilities and determined that a total of eight (8) feeders were noncompliant with the requirement due to a failure to respect the associated most limiting series element for those feeders; 2) Published corrected ratings for the eight noncompliant (8) feeders in its "Tie Feeder Rating Tabulation" document and implemented them in its EMS/SCADA system; and 3) Enhanced an existing software database tool to automatically identify the limiting element of non-DFR BES transmission facilities in order to determine ratings that comply with the requirement and made this tool the central repository for non-DFR BES feeder ratings and associated equipment ratings. |
| Other Factors | <p>Although this was a minimal risk issue, NPCC aggravated this violation to an SNOP with a penalty. FAC-008-3 R6 has been identified as an area of focus in the ERO Enterprise CMEP Implementation Plans from 2016 through 2019. For a large TO such as CECONY, it is expected that Facility Ratings discrepancies be identified and addressed through detective controls and not discovered as part of another capital project or incidentally by an on-watch system operator.</p> <p>Additionally, NPCC reviewed CECONY's internal compliance program (ICP) and considered it to be a mitigating factor in the penalty determination. CECONY's ICP is documented in procedure TP-7560-18 <i>Management of the Compliance Process for NERC and NPCC Reliability Standards</i>. CECONY's internal compliance function is managed by the NERC Reliability Compliance Section (NRC). The NRC Section consists of a manager and a staff of six engineers. The function of the NRC Section is to manage the NERC compliance process for CECONY. Through its ICP, the NRC Section has identified all NERC Standards applicable to CECONY and assigned each to the appropriate corporate organization. The NRC Section manages the NERC CMEP for CECONY and is responsible for the submittal of all required periodic documentation such as guided self-certification evidence and forms. The NRC Section also coordinates audit responses to NPCC. The NRC Section manages a documented process for evaluating issues of possible non-compliance. As part of the ICP, the NRC Section maintains archives of CECONY compliance documentation. The NRC Section actively participates in the NERC and NPCC Standards development process and represents Con Edison on the NPCC Compliance Committee and Regional Standards Committee.</p> <p>In recognition of its extensive ICP and robust culture of compliance, CECONY was qualified for self-logging by NPCC in 2016. As a self-logging entity, CECONY has demonstrated its ability to identify, assess and correct issues of possible noncompliance. CECONY has effectively implemented its self-logging authority and has limited its use of self-logging to minimal risk noncompliance.</p> <p>NPCC considered CECONY's compliance history and determined there were no relevant instances of noncompliance.</p> |

| NERC Violation ID | Reliability Standard | Req. | Violation Risk Factor | Violation Severity Level | Violation Start Date | Violation End Date | Method of Discovery | Mitigation Completion Date | Date Regional Entity Verified Completion of Mitigation |
|---|----------------------|------|---|--------------------------|----------------------|--------------------|---------------------|----------------------------|--|
| WECC2017017976 | PRC-005-6 | R3 | High | Lower | 4/2/2017 | 7/18/2017 | Self-Report | 7/20/2017 | 6/14/2018 |
| Description of the Violation (For purposes of this document, each violation at issue is described as a “violation,” regardless of its procedural posture and whether it was a possible, or confirmed violation.) | | | <p>On July 21, 2017, the entity submitted a Self-Report stating, as a Transmission Owner, it was in violation of PRC-005-6 R3.</p> <p>Specifically, the entity reported that the 18-month testing for one volts direct current (VDC) battery bank had not been completed, per Table 1-4(a) of the Standard, due to errors with the manual entry of maintenance milestones in the tracking software. In particular, the battery continuity, battery terminal connection resistance, and battery intercell connection resistance maintenance activities had not been completed in accordance with the maintenance intervals stated in the entity’s Protection System Maintenance Program (PSMP). The float voltage of battery charger, cell conditions, and physical condition of the battery rack maintenance activities had been completed quarterly. The 18-month testing period requirement for the switchyard VDC battery bank had not been completed prior to the required date of April 1, 2017. 100% of Protection System devices that adhere to a one to two calendar year testing and maintenance interval must be maintained and tested, per the Implementation Plan for PRC-005-6. Upon discovery of the missing tests, the required testing for the VDC battery bank was completed on July 18, 2017.</p> <p>After reviewing all relevant information, WECC determined the entity failed to maintain one VDC battery bank that is included within the time-based maintenance program in accordance with the maximum maintenance intervals prescribed within Table 1-4(a), as required by PRC-005-6 R3.</p> <p>The root cause of the violation was inadequate tracking of testing and maintenance activities in the software tracking system for testing and maintenance dates of the switchyard VDC battery bank.</p> <p>This violation began April 2, 2017, when the entity was required to have 100% Protection System device test completion, and ended on July 18, 2017, when the entity completed all required testing for the VDC battery bank, for a total of 108 days of noncompliance.</p> | | | | | | |
| Risk Assessment | | | <p>This violation posed a minimal risk and did not pose a serious and substantial risk to the reliability of the Bulk Power System. In this instance, DOPD failed to maintain one VDC battery bank that is included within the time-based maintenance program in accordance with the maximum maintenance intervals prescribed within Table 1-4(a), as required by PRC-005-6 R3.</p> <p>The entity did not have effective preventative or detective controls to prevent or detect this violation. However, the entity did maintain all testing and maintenance for the other VDC battery banks applicable to the Standard and Implementation Plan. Furthermore, as a compensating measure, the entity completed float voltage of battery charger, cell conditions, and physical condition maintenance for all VDC battery banks on a quarterly basis which would have alerted entity personnel with issues with the batteries. In addition, the switchyard subject to this violation has AC power coming from multiple sources outside of the switchyard itself, which lessens the risk.</p> | | | | | | |
| Mitigation | | | <p>To mitigate this violation, the entity:</p> <ol style="list-style-type: none"> a. completed battery continuity, battery terminal connection resistance, and battery intercell connection resistance testing for the switchyard VDC battery bank; b. updated its PSMP to provide better clarity on battery testing responsibilities; and c. added batteries to the PSMP tracking software. | | | | | | |
| Other Factors | | | <p>WECC determined that the Expedited Settlement Agreement disposition option without a penalty is appropriate for the following reasons:</p> <p>WECC did not apply mitigating credit for the entity’s Internal Compliance Program (ICP) as WECC has not reviewed a documented ICP for this entity.</p> <p>WECC considered the entity’s PRC-005 compliance history in determining the disposition track. WECC considered the entity’s PRC-005 compliance history to be an aggravating factor in the penalty determination (WECC200800997 and WECC2014014179).</p> | | | | | | |