

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
WECC2017017041	VAR-002-2b	R2	Medium	Severe	This violation began on 7/14/2014, when CATA registered as a Generator Operator.	This violation ended on 7/28/2017 when CATA began using an Operations Control Center to monitor and alarm voltage.	Self-Report	10/17/2017	11/2/2017
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 February 16, 2017, CATA submitted a Self-Report stating that, as a Generator Operator, it was in violation with VAR-002-2b R2.</p> <p>Specifically, CATA reported that, for its 110 MW photovoltaic power station, it had not consistently monitored voltage and therefore had not maintained or made notifications to the Transmission Operator (TOP) when the generator voltage had traversed outside the voltage schedule. However, during the time in which voltages were not monitored, the interconnecting utility would make requests when the need arose to control voltage and CATA would respond accordingly.</p> <p>CATA failed to maintain the generator voltage schedule directed by the TOP as required by VAR-002-2b R2.</p> <p>The root cause of the violation was CATA's lack of controls to ensure its Facility’s voltage monitoring, alarming, and communication equipment support and comply with the TOP’s generator voltage schedule.</p> <p>WECC determined that this violation began on July 14, 2014, when CATA registered as a Generator Operator and ended on July 28, 2017, when CATA began using an Operations Control Center to monitor and alarm voltage for a total of 1110 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 (BPS). In this instance, CATA failed to maintain the generator voltage schedule directed by the TOP as required by VAR-002-2b R2. Such failure could potentially result in undamped voltage oscillations and the unplanned tripping of the Facility. CATA owns and operates 110 MW of generation that was applicable to this issue.</p> <p>CATA implemented the practice of responding immediately to requests from the interconnecting utility to control voltage and would respond accordingly.</p>						
Mitigation			<p>To mitigate this violation, CATA:</p> <p>1) implemented controls and telemetry so the Operations Control Center (OCC) can monitor and control the facility to the point of interconnection;</p> <p>2) transmitted voltage data from the facility to the OCC;</p> <p>3) set up alarms and started monitoring voltage and alarms on voltage deviations 24/7 on the Monarch Energy Management System at the OCC;</p> <p>4) refreshed VAR-002-4 communication training with OCC staff;</p> <p>5) purchased the webCompliance tool from OATI; and</p> <p>6) increased required skills for new OCC employees.</p>						
Other Factors			<p>WECC considered CATA’s and its affiliates’ VAR-002 R2 compliance history in determining the penalty. WECC considered CATA’s and its affiliates’ VAR-002 R2 compliance history to be an aggravating factor in the penalty determination (NERC Violation ID WECC2016015506 and WECC2016015507). WECC also considered that the violation duration is 1110 days as described above. CATA did not have sufficient controls in place that could have helped identify the issue sooner to lessen the violation duration and thereby lessen the risk.</p> <p>WECC did not give credit for CATA’s Internal Compliance Program (ICP). Although CATA does have a documented ICP, WECC determined that it did not aid in the discovery of this noncompliance or mitigate the risk while noncompliant.</p>						

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WECC2018019603	PRC-001-1	R1	High	Severe	6/18/2007 when the Standard and Requirement became mandatory and enforceable	5/29/2018 when GBOC completed its Protection Systems Training documentation in accordance with the Standard and Requirement	Self-Report	11/14/2018	12/18/2018
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 April 30, 2018, GBOC submitted a Self-Report stating that, as a Generator Operator, it was in noncompliance with PRC-001-1 R1. Specifically, GBOC reported that during an internal compliance review in March of 2018, it discovered that it had not maintained adequate evidence to demonstrate that 10 plant operators at one generating station were familiar with the purpose and limitation of the protection system schemes that GBOC had applied in the plant area. The GBOC plant operating personnel team each had more than 5 years of experience working at this plant as either a Lead Operator and/or a Control Room operator. As part of normal operations, GBOC assigned more than one of these individuals to be present on-site at all times. Additionally, GBOC had trained the 10 plant operators on the plant area's protection system schemes through on-the-job knowledge transfer and hands on learning, although it had never had a formal training program for such activities.</p> <p>After reviewing all relevant information, WECC determined that GBOC failed to demonstrate with evidence that its operating personnel were familiar with the purpose and limitations of protection system schemes applied to one of its generating stations, as required by PRC-001-1 R1.</p> <p>The root cause of the violation was the lack of a formalized training program for the R1 activities and therefore GBOC was not able to demonstrate through evidence that it had ensured compliance with R1.</p>						
Risk Assessment			<p>WECC determined that this violation posed a minimal risk and did not pose a serious and substantial risk to the reliability of the BPS. In this instance, GBOC failed to demonstrate with evidence that its operating personnel were familiar with the purpose and limitations of protection system schemes applied to one of its generating stations, as required by PRC-001-1 R1. GBOC owned and operated approximately 2,200 MW of generation located at this plant and also operated and maintained one Protection System scheme on a 230 kV transmission line to a substation with 836 MVA of generation. Such failure could result in an unintended loss of the 836 MVA of generation, 2,200 MW of generation, or impact the 230 kV transmission elements if the operating personnel were unfamiliar with the Protection System scheme. Therefore, WECC assessed the potential harm to the security and reliability of the BPS as intermediate.</p> <p>However, GBOC had controls in place that required at least one experienced generating operator was on staff at all times at the generating station in scope. Additionally, this violation was related to maintaining proper training evidence rather than a true lack of familiarity or understanding of protection system schemes. Based on this, WECC determined that there was a low likelihood of causing intermediate harm to the BPS. No harm is known to have occurred.</p>						
Mitigation			<p>To remediate and mitigate this violation, GBOC:</p> <ol style="list-style-type: none">1) created a training document on protection system schemes for operating personnel and established that the training should be repeated at a minimum of every 36 months;2) executed training on protection system schemes for the required personnel and captured the evidence to demonstrate compliance;3) identified a team at GBOC to determine if the computer based training program needs to be updated for changes in protection system schemes, who will be responsible for coordinating the changes as well as how the changes will be communicated with the rest of the required personnel; and4) developed a computer based training on protection system schemes as a required part of the operator onboarding.						
Other Factors			<p>WECC applied an aggravating factor for the following reason:</p> <ol style="list-style-type: none">i. WECC escalated the disposition option to an expedited settlement due to the significant violation duration, which is 3,999 days as described above. <p>Other Considerations:</p> <ol style="list-style-type: none">i. WECC did not apply a credit for GBOC’s Internal Compliance Program because it did not have any detective controls in place that could have helped identify the violation sooner to lessen the violation duration.ii. WECC considered GBOC’s compliance history and determined GBOC did not have any relevant compliance history.						

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WECC2017017203	PRC-005-1.1b	R2	High	High	1/1/2015, when IPCO failed to provide documentation of the implementation of maintenance and testing the metering devices that send signals to one relay (Current Transformers and Potential Transformers)	2/24/2017, when IPCO completed and documented a Relay Meter Calibration Check for the Protection System relay	Self-Report	4/20/2017	8/17/2017
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 30, 2017, IPCO submitted a Self-Log stating that, as a Generator Owner, it was in violation of PRC-005-2 R3. On February 15, 2017, IPCO was notified that the violation does not qualify for a Self-Log due to the violation duration supported by the original evidence for the reported scope in addition to compliance history with PRC-005. On March 7, 2017, WECC created the Self-Report stating that, as a Generator Owner, IPCO was in violation with PRC-005-1.1b R2.</p> <p>Specifically, IPCO reported that during an internal compliance review in December 2016, it identified missing maintenance and testing records for ten Protection System relays. The testing should have been completed on January 1, 2015, but was not completed until February 24, 2017.</p> <p>After reviewing all relevant information, WECC determined that there was a change in scope from what IPCO originally reported. WECC found that IPCO failed to provide documentation of its Protection System maintenance and testing program and the implementation of that program for the metering devices that send signals to one relay (Current Transformers and Potential Transformers), as required by PRC-005-1.1b R2.</p> <p>The root cause of the violation was not having formally documented controls to verify that relay testing and maintenance were performed within the required timeframe.</p> <p>WECC determined that this violation began on January 1, 2015, when IPCO failed to provide documentation of the implementation of maintenance and testing the metering devices that send signals to one relay (Current Transformers and Potential Transformers) and ended on February 24, 2017, when IPCO completed and documented a Relay Meter Calibration Check, for a total of 786 days of noncompliance.</p>						
Risk Assessment			<p>WECC determined this violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the Bulk Power System (BPS). In this instance, IPCO failed to provide documentation of its Protection System maintenance and testing program and the implementation of that program for only one Protection System relay, as required by PRC-005-1.1b R2.</p> <p>However, the Protection System relay is associated with IPCO’s 12 kV – 4.16 kV generator bus and could only have tripped the 1.75 MVA generator. This generator runs less than 15% of the time during a typical year, and the IPCO grid is operated to remain stable should that amount of generation trip off.</p>						
Mitigation			<p>To mitigate this violation, IPCO:</p> <p>1) completed testing and maintenance for the Protection System relay;</p> <p>2) formalized the annual review of Protection System maintenance and testing activities performed by the area Generation Technician Leaders by implementing two SharePoint workflows and associated reminders; and</p> <p>3) improved a checklist of required items for maintenance and testing and incorporated the checklist into the workflow reminders and distributed it to key staff.</p>						
Other Factors			<p>WECC considered IPCO’s PRC-005 R2 compliance history in determining the disposition track. WECC considered IPCO’s PRC-005 R2 compliance history to be an aggravating factor in the disposition determination (NERC Violation IDs WECC200800628, WECC200901452, and WECC201102886).</p> <p>WECC did not apply mitigating credit for the entity’s Internal Compliance Program (ICP). Although the entity does have a documented ICP, WECC determined that it was not effective in detecting or preventing the above violation.</p>						