

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
SERC2017018437	FAC-009-1	R1	Medium	High	6/18/2007 (when the Standard became mandatory and enforceable)	12/14/2018 (when Ameren corrected its last incorrect element Rating)	Compliance Audit	8/1/2019	TBD
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>During a Compliance Audit conducted from June 13, 2017 to October 3, 2017, SERC determined that Ameren, as a Transmission Owner, was in violation of FAC-008-3 R6. SERC determined that the violation started under FAC-009-1 R1 and ended under FAC-008-3 R6. Ameren did not have Facility Ratings that were consistent with its Facility Ratings methodology (FRM).</p> <p>During the on-site audit, the SERC audit team conducted facility walk-downs. SERC identified discrepancies between the FRM and the established element Ratings in the database for the Big River facility and the one-line drawing for the Spencer Creek facility, neither of which impacted the Facility Rating. The audit team found that Ameren had recently revised the database and substation one-line drawings. After the audit, and in response to a request for additional information to determine the complete scope of the discrepancies, Ameren conducted a system walk-down to review the accuracy of the physical components against the current system drawings. Ameren reviewed each element Rating to ensure they were consistent with its FRM, identified the Most Limiting Element (MLE), and established the correct Facility Rating. Ameren reviewed the Facility Rating used in operations and compared it with the Rating of the MLE for each Facility. As a result of this review, Ameren identified incorrect element Ratings for 2,816 of 27,330 (10.3%) elements at 56 of 297 transmission Facilities, 6 of which had both up-rates and de-rates. Ameren made corrections to the Facility Ratings, which resulted in 29 Facility Rating decreases (with a range from .01% to 37.2%) and 27 Facility Rating increases (with a range from 2.5% to 119.2%). Also, five of the 56 facilities (all of the facilities were derated) experienced exceedances of the correct Facility Ratings. The number of exceedances at the facilities ranged from one to 36 in a one year period. Overall, there were 62 exceedances during this time period.</p> <p>This noncompliance started on June 18, 2007, when the Standard became mandatory and enforceable, and ended on December 14, 2018, when Ameren corrected its last incorrect element Rating.</p> <p>The cause of this violation was management oversight for failing to implement a change control process to verify element changes and that such changes were reflected in its ratings database and substation one-line diagrams.</p>						
Risk Assessment			<p>This violation posed a moderate risk and did not pose a serious or substantial risk to the reliability of the bulk power system (BPS). Ameren’s failure to establish Facility Ratings that were consistent with its FRM could have resulted in erroneous outage planning, violations of System Operating Limits, damage to Facilities, and incorrect coordination with interconnecting systems. However, the risk to the BPS was mitigated because all five facilities that exceeded the Facility Rating were limited to lower voltage, 138 kV transmission facilities. No harm is known to have occurred.</p>						
Mitigation			<p>To mitigate this violation, Ameren:</p> <ol style="list-style-type: none"> 1) developed and implemented a change management process to capture any element and Overall Facility Rating changes to BES Facilities during unplanned and planned outages; <ol style="list-style-type: none"> a. The change management process for planned outages includes independent verifications on the design, the ratings database accuracy and to verify the constructed facilities are correct; b. The change management process of unplanned outages includes an independent verification on the components installed and the ratings database entry; and c. The change management process is an automated process that utilizes an electronic approval of the tasks and verifications prior to placing planned projects in-service; 2) communicated the new process to the appropriate individuals; 3) hired two independent consulting firms to complete the walk-downs of Ameren’s 297 substation Facilities to identify any additional discrepancies; 4) communicated the results of the initial walk-downs to SERC staff on a quarterly basis in 2018; and 5) performed a reverification of the walk-down results. 						
Other Factors			<p>SERC reviewed Ameren's internal compliance program and considered it to be a neutral factor in the penalty determination.</p> <p>SERC awarded mitigating credit for Ameren’s cooperation and settlement of the enforcement action.</p> <p>SERC considered Ameren’s compliance history and determined that there were no relevant instances of noncompliance.</p>						

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SERC2017018436	FAC-009-1	R1	Medium	Severe	6/18/2007 (when the Standard became mandatory and enforceable)	12/11/2018 (when AUE completed the Facility Rating changes)	Compliance Audit	12/13/2018	TBD
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>During a Compliance Audit conducted from June 13, 2017 to October 3, 2017, SERC determined that AUE, as a Generator Owner, was in violation of FAC-008-3 R6. SERC determined that the violation started under FAC-009-1 R1 and ended under FAC-008-3 R6. AUE did not have Facility Ratings that were consistent with its Facility Ratings methodology (FRM).</p> <p>During the on-site audit, the SERC audit team conducted a facility walk-down of the Peno Creek and Pinckneyville facilities, and identified discrepancies between the FRM and the established element Ratings at both generating facilities. After the audit and in response to a Request for Additional Information to determine the complete scope of the discrepancies, AUE conducted a system walk-down of all AUE generating facilities to review the accuracy of the physical components against the current system drawings. AUE reviewed each element Rating to ensure they were consistent with its FRM, identified the Most Limiting Element (MLE), and established the correct Facility Rating for all of its generating facilities. AUE reviewed the Facility Rating used in operations and compared it with the Rating of the MLE for each Facility. As a result of this review, AUE discovered that it did not establish Facility Ratings in accordance with its FRM on 18 of its 63 generating facilities. AUE made corrections to the Facility Ratings, which resulted in 15 Facility Rating decreases (with a range from 1.8% to 70.8%) and three Facility Rating increases (12.5%). Also, 10 of the 18 facilities, all of which were derated, experienced exceedances of the correct Facility Ratings. As Osage 7 & Osage 8 share a common bus, the exceedance is only on the bus and not on each facility. The number of exceedances at the facilities ranged from one to 161 during a one year period. Overall, there were 762 exceedances during this time period.</p> <p>This noncompliance started on June 18, 2007, when the Standard became mandatory and enforceable, and ended on December 11, 2018, when AUE corrected its last incorrect Rating.</p> <p>The cause of this violation was management oversight for failing to implement a change control process to verify element changes and that such changes were reflected in its ratings database and substation one-line diagrams.</p>						
Risk Assessment			<p>This violation posed a moderate risk and did not pose a serious or substantial risk to the reliability of the bulk power system (BPS). AUE’s failure to establish Facility Ratings that were consistent with its FRM could have resulted in the conductors, buses, and breakers overheating and failing, resulting in unit trips. The risk was moderate because the highest Facility Rating discrepancy at the AUE facilities was 70.8%, and five facilities had over 100 exceedances (161, 113, 110, 108, and 104). However, the risk was mitigated because AUE’s total generation impacted by incorrect Facility Ratings was 1,436 MW, which was a small amount of generation in the MISO Reliability Coordinator (RC) area; therefore, the impact to the MISO RC area from AUE unit trips was small. Moreover, the 1,436 MW of impacted generation is 14.58% of AUE’s total 9,849 net MWs of generation. No harm is known to have occurred.</p>						
Mitigation			<p>To mitigate this violation, AUE:</p> <ol style="list-style-type: none"> 1) hired consultants to perform walk downs at 100% of its 63 generating facilities to verify Facility Rating components in order to correctly rate the overall Facility Rating; 2) revised its FAC-008 program procedure to include a verification process to validate Facility Ratings and to require an independent reviewer to verify accuracy of the Ratings; 3) communicated changes to the procedure to Subject Matter Experts; 4) established a weekly report of all maintenance jobs created by the Energy Centers that involve components from the Generator output terminals to the transmission tie point, to be reviewed for impacts to the FAC-008 program; 5) established a point of reporting responsibility for all generating units, which is documented in the FAC-008 program documents; 6) created an internal commitment in the Ameren commitment tracking system to conduct sample audits at three randomly selected energy centers every three years to ensure compliance with FAC-008-3; 7) added an independent reviewer signature line for Visio diagram changes; and 8) completed an additional walk-down of 100% of Ameren's 63 generation facilities in Q1 2020 to validate the Maximum Equipment Rating one-line diagrams. 9) bolstered the existing change management process to better defined the types of design changes that warrant facility rating document updates 						
Other Factors			<p>SERC reviewed AUE's internal compliance program and considered it to be a neutral factor in the penalty determination.</p> <p>SERC awarded mitigating credit for AUE’s cooperation and settlement of the enforcement action.</p> <p>SERC considered AUE’s compliance history and determined that there were no relevant instances of noncompliance.</p>						