

AEP BELLEFONTE, BEXLEY, SOUTH SIDE LIMA, WEST END FOSTORIA, NATRIUM SHORT CIRCUIT VIOLATION(S)

The 2023 PJM short circuit cases identified several 34.5kV, 40kV and 69 kV breakers as overdutied in the 2023 time frame as part of the normal RTEP short circuit activities to review both 5 year and two year cases for short circuit analysis. AEP has implemented real-time operating procedures to reduce the short circuit fault current while personnel are inside the station. Short circuit model changes began to be implemented in 2018 to explicitly model sub-transmission breakers in their line protection positions to better simulate fault interrupting requirements for each breaker. As this breaker modeling is adjusted and updated in the PJM cases, they have been identified as overdutied in the near-term (2-year out) short circuit case.

As a result, these projects will be designated immediate need to address the near term violation(s) of the overdutied 34.5kV, 40KV and 69kV breakers at the Bellefonte, Bexley, South Side Lima, West End Fostoria, and Natrium substations in the 2023 timeframe. Because these breakers are wholly located inside existing 69KV and below substations owned by AEP, AEP will be the designated entity to perform the work to replace the overdutied breakers.