

AEP - JUG STREET, HYATT SHORT CIRCUIT VIOLATION(S)

The 2024 PJM short circuit cases identified 12 138 kV breakers at Jug Street (10) and Hyatt (2) substations as overdutied in the 2024 time frame as part of the normal RTEP short circuit activities to review both five year and two year cases for short circuit analysis.

The Modeling Correction has been attributed as the driver for this overdutied condition identified in the 2022 series RTEP -2024 short circuit analysis at the Jug Street substation. A 345/138 kV transformer at Babbit substation was modeled offline incorrectly in the previous year model. As this transformer modeling is corrected in the PJM cases, these Jug Street breakers (D, H, J, L, M, N, BC, BD, BE, BF) have been identified as overdutied in the near-term (2-year out) short circuit case.

The Modeling corrections have been attributed as the driver for this overdutied condition identified in the 2022 series RTEP -2024 short circuit analysis at the Hyatt substation for the breaker 'AD1', which wasn't modeled in last year short circuit cases. As this breaker modeling is updated in the PJM cases, it has been identified as overdutied in the near-term (2-year out) short circuit case.

The Modeling updates in the Hyatt area have been attributed as the driver for this overdutied condition identified in the 2022 series RTEP -2024 short circuit analysis at the Hyatt substation for the breaker 'AB1', which was just below 100% last year, but is pushed slightly over 100% this year in the (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 138kV breakers at the Jug Street (D, H, J, L, M, N, BC, BD, BE, BF) and Hyatt (AD1, AB1) substations in the 2024 timeframe. Because these breakers are wholly located inside existing substations owned by AEP, AEP will be the designated entity to perform the work to replace the overdutied breakers.