

McNary Isophase Bus

This project seeks to replace the isophase bus, rehabilitate the high voltage bus, and replace the high voltage switch systems at McNary Dam.

This project is to replace the existing medium voltage isophase bus with new isophase bus and through bushings rated suitable for the main unit uprates at all seven GSU transformer banks, the delta bus in the powerhouse, and back to the main unit generator terminals; rehabilitate the existing 230kV tubular bus; replace seven existing manual disconnect switches with new motor-operated disconnect switches equipped with surge resistors; and perform fastener torqueing and replacement of missing or damaged latticework on the roof top lattice work structures.

The isophase bus has become weathered and deteriorated over its sixty-year lifespan, which leads to the possibility of rainwater leaking into the isolated-phase bus housings and circulating ground currents in the housings, both inside and outside the powerhouse. The 230kV tubular bus at Lines 1 through 4 has developed cracks in some places due to water ingress and subsequent freezing. The 115kV and 230kV disconnect switches have fallen into disrepair. The steel latticework structures supporting the tubular bus at Lines 5 and 6 are missing some as-designed structural members and fasteners due to equipment modifications or other undetermined reasons.