McNary Main Unit 1-4 and 7-12 Stator Winding Replacement

The project will replace the stator windings replacement on units 1-4 and 7-12 at the McNary powerhouse. The McNary Dam is one of four federal hydroelectric projects on the main stem of the lower Columbia River. The dam was completed in 1953, and all 14 turbines in the powerhouse were operating by February 1957. The generator stator windings are over 50 years old, three of the twelve in the family have failed in service, and the typical life of a winding is approximately 35 years. Of the 10 units proposed for stator winding replacement, two of the units in service are currently de-rated as a result of prior failures, which means that the output has been reduced.

Because of the importance of McNary Dam to FCRPS generation, the asset management strategy is to replace the windings on a systematic, 2-per year schedule such that the full 10 replacements are completed within a 5-year period. This approach is intended to minimize the risk of winding failure and lost generation going forward.