

Grand Coulee Transformer Bank K10 Replacement

The Grand Coulee transformer replacement project entails the purchase and installation of three identical 50MVA transformers at Grand Coulee. The Grand Coulee units are critical to the FCRPS for power production, river management, system stability and ancillary services. This project will replace all three phases for unit G-10 generator step up transformer bank (bank K10), located in Grand Coulee's Right Power Plant, as well as salvage and retain two of the three single-phase 43MVA units that will be removed as temporary spares for the Right Power Plant.

This project mitigates the risk of revenue loss due to inadequate availability of spares causing an extended outage. Prompt action is required because of the current risk of failure, the increasingly long lead times to procure and deliver new transformers, and Reclamation's future rehabilitation of the Third Powerhouse generating units, scheduled to commence in the latter part of FY 2012. A violent failure of one of the three phases of Bank K10 occurred in 2006, which illustrates the existing risks and potential costs of a failure. An existing single spare transformer was used to restore the generating unit to service. By using the last remaining spare transformer for this bank, there are no remaining spare transformers for the 27 Right Power Plant generator step-up transformers. The two phases of the transformer bank that remained in service have exceeded their expected useful life and present increased risk of failure, personnel injury, and loss of revenue.

The project is scheduled to be completed by December 31 2010. Project cost estimates are business sensitive information and cannot be disclosed until the competitive solicitation, evaluation, negotiation and award processes with vendors is completed.