

Grand Coulee 500kV Switchyard Relay Replacement

This project will replace protective relays and microwave transfer trip equipment between Grand Coulee's Third Power Plant and its 500kV Switchyard and between Grand Coulee's 230kV switchyard and the 500kV Switchyard. The 500 kV switchyard plays a critical role in moving generation from Grand Coulee's three powerhouses (nameplate of 6,735 MW) to BPA's 500 kV Transmission system and maintaining transmission system reliability and stability across the northwest. This protective equipment is presently comprised of solid state relays and transfer trip equipment installed in the 1970s. The relays are experiencing reliability problems and there is increasing likelihood that they may not operate properly, which could result in a cascading outage as a result of Grand Coulee unit trips because of faulty relay operation. The investment in new relays, transfer trip and communications upgrades will improve reliability and bring the components into compliance with NERC/WECC reliability standards.