

Chief Joseph Governors

This project will upgrade the 27 governors in the Chief Joseph powerhouse with digital controls along with replacement of associated components. Governor upgrades are a regional priority for the Corps of Engineers, arising from a 2000 study that recommended a comprehensive upgrade program. The governors being upgraded are the original Woodward and Voest-Alpine designs. While they are functional and meet minimum operating standards they are now 36 to 57 years old. The aging systems are becoming more difficult to maintain due to lack of availability of parts and cumbersome user interfaces. The governor upgrades will improve reliability and will counteract the increasing potential for governor failure that could cause forced outages. New digital governors will allow more stable and fine control of the turbine/generator units. This will provide efficiency improvements that will benefit plant generation. The installation of digital controls will allow for smoother synchronization of the generators and allow for more precise load delivery ramping.