

Ice Harbor Intake Gate Hydraulic System Upgrade

This project seeks to upgrade the Intake Gate Hydraulic System at Ice Harbor Dam.

Starting around 2011, several Trouble Reports (TRs) from shift operators in the Facilities and Equipment Maintenance (FEM) database documented multiple oil leaks, desiccant filter replacements, and remote operation of the intake gate pumps failures. In the last 7 years, there have been two failures of the intake gate hydraulic system where the intake gates dropped while the units were operating. Recently there have been 4 reportable oil spills (July 2017, August 2017, April 2018, and August 2018). Due to these issues, the intake gate hydraulic system annual preventive maintenance has increased from 20 hours to 40 hours annually. The hydraulic system is increasingly unreliable; this investment improves all facets of the intake gate hydraulic system, by improving seals, spill containment, and oil handling equipment reducing both the likelihood and impact of oil discharge to the river. Upgrades to the equipment restores operational safety to the plant generators by assuring timely response to cut off flow of water through the turbines in the event of failure of the water control equipment.