

Lower Granite Turbine Intake Gate Hydraulic System Upgrade

The purpose of this project is to upgrade the intake gate hydraulic system at Lower Granite Dam. This replacement will reduce operational and safety risks, restore functional reliability, and reduce environmental risk of oil loss associated with the operation of the hydraulic system.

Project components include the following:

- Replace existing cylinders with new intake gate hydraulic cylinders.
- Replace all pumps and motors including the pressurizing unit pump and two power unit pumps with their respective motors
- Replace the hydraulic accumulators and all piping and hydraulic hoses
- Add off-line oil filtration and oil sampling ports
- Upgrade oil metering equipment and tank level sensors
- Provide new control stations for each unit, and remote control operation from the Control Room to integrate the emergency closure control scheme
- Rehab the gate position indication system to provide position indication in the Control Room