

Libby Intake Gantry Crane

This project seeks to replace the intake gantry crane at Libby Dam.

The crane currently cannot install the emergency gates under emergency conditions, one of the primary functions of this crane. A runaway turbine could occur if the generator wicket gates are not working and the emergency gates cannot be deployed, an unlikely, but credible risk. If this situation were to occur the emergency gate would be lowered into place. However, in its current condition, the crane would likely fail as the emergency gate is lowered under flow potentially damaging the penstock by the vacuum created.

The Seattle District Libby Intake Crane lifts penstock bulkheads, emergency and sluice gates, and trash racks. The 75-ton main hoist lifts and deploys the emergency closure gate for the penstocks. The 60-ton auxiliary hoist lifts sluice gate and penstock bulkheads. The trash rack hoist that lifts the trash racks is currently not operational. The crane was designed and fabricated by Fulton Shipyard in 1973.