

## **McNary Intake Gantry Crane #5**

This project will replace the intake gantry crane (crane #5) at McNary. This crane was original installed in 1953. The crane travels on embedded rails the entire length of the powerhouse to service all 14 main units. The crane serves multiple purposes through the use of three hoists:

- The main hoist (140 tons) is used to isolate the main units during maintenance by installing the intake gates.
- The auxiliary hoist (20 tons) is used to clear trash from the screened intake of the turbines. The hoist uses a clamshell to scrape trash from the rack and place it in a truck for disposal.
- The hammerhead (with dual 10 ton hoists) is used for extending the fish screen arms, assisting with maintenance, inspection and repair of the bulkheads, intake gates, and vertical barrier screens, dipping for fish, setup of other equipment maintenance on the intake deck and retrieval of large debris.

The original function of the crane was solely to support the maintenance, operation and repair of the bulkheads and intake gates. Due to fish passage criteria, this crane operates more than the original design anticipated. The loss of the ice and trash sluiceway along with the addition of fish screens has substantially increased the number of tasks the crane is required to perform.

The crane is rated in “poor” condition and does not have the lifting capability necessary to safely perform its expanded duties. The crane has been identified for replacement in the McNary Modernization Project Plan and in Federal Hydro’s current Asset Plan. A reliable and capable crane is essential to support the upcoming modernization program at McNary.