

OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 15LEA01 Roll Gate Repair

COORDINATION DATE- 10 July 2015

PROJECT- Leaburg Dam

RESPONSE DATE- 24 July 2015

Description of the problem

In January 2012, the hydraulic hoist mechanism for Roll Gate 2 at Leaburg Dam catastrophically failed. Investigation of the failure, design, and fabrication of a new system took place between 2012 and 2014. Replacement of the hoist mechanism for Gate 2 was completed in early 2015 and included installing a new gate hoist with electric motor, gear train, braking system, variable speed drive, and ancillary devices.

In December 2014, the hydraulic hoist mechanism for Roll Gate 1 failed, leaving it locked in a closed position. After the failure of Roll Gate 1, the FERC directed EWEB to replace the hydraulic hoist mechanism for both Gates 1 and 3 with a new hoist mechanism similar to the recently installed mechanism for Gate 2.

EWEB will be limiting the use of Gate 3 as much as possible to minimize the risk of it failing in a similar fashion as Gates 1 and 2. EWEB will primarily use Gate 2 until the hoist mechanisms for the other two are replaced.

Type of outage required/Impact on facility operation

Operations will be normal while the new hoist systems are being installed. Testing will be necessary following the installation, during which bulkheads will be installed to isolate the gate from Leaburg Lake. Since this will require some work in/on the water, river flow may be moved from one gate to another for safety during installation and removal of the bulkheads. This work won't otherwise impact the lake level or operation of the fish ladders.

Dates of impacts/repairs

Roll Gate 1 bulkheads are expected to be installed in late September 2015 and removed in the beginning of November 2015, at which time Roll Gate 1 is expected to be fully operational. Roll Gate 3 bulkheads are expected to be installed in early September 2016 and removed in early October 2016, at which time all three gates will be fully operational.

Length of time for repairs

The work to replace the Roll Gate 1 hoist system begins in June and is expected to be done by the end of 2015. Work on Roll Gate 3 is expected to begin June 2016 and be completed by the end of 2016.

Expected impacts on fish passage

EWEB will primarily use Gate 2 until the hoist mechanisms for the other two are replaced. Therefore, flow will be passing through the center of the dam rather than through the gates near the ladders. Although Gate 3 is operational, EWEB will limit its use to minimize the potential for failure.

No impacts to fish passage are anticipated. However, EWEB does not have the ability to transfer flow to the gates nearest the ladders.

Comments from agencies

No comments.

Final results

HMT concurred with work outlined above.

Please contact Lisa McLaughlin with questions or concerns.

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