**OFFICIAL COORDINATION REQUEST FOR**

**NON-ROUTINE OPERATIONS AND MAINTENANCE**

**COORDINATION TITLE-** 15 MCN 014 WASCO PUD Project

**COORDINATION DATE- December 15, 2015**

**PROJECT- McNary**

**RESPONSE DATE- FPOM December 17, 2015**

**Description of the problem**

On November 18th, 2015, at 1620, a crane failure at Northern Wasco County and Klickitat County PUD’s hydroelectric project at McNary Dam resulted in extensive damage that will delay completion of this runner replacement job by about 3 months.

While picking the shaft, inner head cover and runner, about 20 tons, a weld on the crane failed allowing the load to drop about 18”onto the bearing pot footings. The damage is extensive and not yet fully realized. It was the crane manufacture’s weld so the PUD’s insurance company is pursuing litigation with the manufacturer, adding additional delay.

The current time estimate for the commissioning process is late May or early June. Also, the commissioning may be more complex and require one or two more days with fish ladder auxiliary water disruptions. So, what was scheduled for the first two days of the commissioning, could take up to four days.

During the initial phase of the commissioning (up to 4 days) the unit will be run at less than capacity for a number of hours to determine heat rise on the unit bearings and to ascertain the conditions of the operation parts. During those periods, the total volume of water needed to supply the fishladder for its normal operations will be reduced by up to half. By using water from the current bypass system at the project, the operators will be able to make up the remainder of the water needed to bring the fishladder flows up to normal.

There will be short periods of time during those operations, while setting up and terminating the test conditions and then adjusting the auxiliary supply, when the flows to the ladder will be reduced. We expect those timeframes to be less than 15 minutes, 8 to 10 times during the first four days of commissioning work.

The rest of the commissioning process is simply 10 continuous days of operation at normal operating capacity and flow. It is possible that during that 10 day period, a control system issue could necessitate shutting down. If that happens, the bypass system would be used to provide auxiliary flow to the ladder.

The fish ladder will be supplied with water using the auxiliary water bypass system until the commissioning process begins.

**Type of outage required**

No outage, but reductions in North ladder auxiliary flow as outlined above are expected.

**Impact on facility operation**

This work will result in reduced auxiliary water to the north fish ladder for short periods of time (15 minutes) 8 or 10 times in the first four days of the commissioning/testing process.

**Dates of impacts/repairs**

Approximately late May to early June, 2016.

**Length of time for repairs**

About 12 – 14 days, up to 4 days with up to 8 to 10 short disruptions to auxiliary flow, 10 days with potential for flow disruption but with bypass system in standby.

**Expected impacts on fish passage**

As is obvious from the fish count tables for May and June for the years, 2010 – 2014 pasted below, there are lots of fish moving upstream at this time of year. **Consequently, the PUD is prepared to modify the contract with the contractor to schedule the commissioning work at night. A recommendation is requested, please include preferred hours.**



The disassembly of the unit has gone well, with the exception of this crane failure, noise and vibration issues have been minimal. Contractors were able to use hydraulic tools which are quieter than pneumatic. We expect that to be the case when we start to put the unit back together as well.

**Comments from agencies**

**Final results**

Please email or call with questions or concerns.

Thank you,