

MEMORANDUM FOR RECORD: 14 LWG 01 – MFR Fish Pump Outages at LWG-28Feb2014

SUBJECT: Fish Pump Outages – Lower Granite Adult Fishway Auxiliary Water Supply

Lower Granite experienced some difficulties in starting up the Auxiliary Water System (AWS) that supports the Lower Granite Fish ladder. The following is a description of the significant events.

Safe clearances were released on the AWS pumps on the afternoon of Feb 26. With the exception for the clearance on Fish pump (FP)#3. During winter maintenance, FP #3 was found to have guide bearing issues that need to be fixed. Estimated return to service for Fish Pump #3 is mid-March. After clearances were released, bearing oil heaters were turned on to start warming up the oil (usually takes about 24 hours). In the morning of Feb 28, FP #1 failed to start. Troubleshooting the system lead to the finding an out of adjustment interlock linkage in the starter (breaker) for FP #1. It is my understanding that these are somewhat difficult to adjust and the breaker is closed, but still cannot be closed automatically. If the breaker were to trip, we would need to kill supply power upstream and call out an electrician to reclose it. FP #1 was finally restarted March 1 at about 11:00 AM. FP #2 was started and running since the morning of Feb 28.

Current status of AWS pumps:

FP #1 Running but with interlock linkage issues

FP #2 Running and fine

FP #3 OOS, lower guide bearing repairs (Estimated RTS Mid-March)

Path Forward;

Return FP #3 to service (Mid-March)

At this time we are looking at the prints to see if we can adjust the interlock linkage for FP#1's starter breaker without taking down more than one FP. If we can, then we will need to bring down the AWS system to swap operating pumps to be #2 and #3 (swap discharge bulkheads from pump 3 to 1, usually takes about 1-1.5 hrs). If we are not able to (work on FP #1 w/o significantly impacting the AWS operation), we will need to propose a better defined work plan and schedule.

Respectfully,

Rich Hilt

U.S. Army Corps of Engineers,

Chief of Operations

Lower Granite Dam

Work (509) 843-1493 x253

BB (509) 843-7200 (No signal at dam)