OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE - 21 LWG 01 – Unit Exciter Testing
COORDINATION DATE - February 16, 2021
PROJECT - Lower Granite Dam
RESPONSE DATE - February 26, 2021

Description of the problem
Units 2 and 3 recently received exciter system upgrades. PSS (Power System Stabilizer) testing and tuning (per VAR-501-WECC-3.1) is required in addition to regular model verification testing (MOD-026), within 180 calendar days of the change in control systems. Testing was scheduled for February 16 and 17 but was delayed due to heavy snow, and challenging travel conditions. Due to conflicting work including ESBS installation February 22-26 and early water up of the juvenile bypass and collection facilities, Lower Granite is unable to support this testing over the next couple weeks and is requesting to reschedule for March 15-18. The additional two days are to allow for onsite coordination with other activities and potential delays related to weather. Testing will involve operating each unit at no load about 1.5 hours total and at normal operating load about 1 hour over 2 days of the requested week. This will result in out of priority operation. Fish screens will be down.

Type of outage required

Impact on facility operation
Units 2 & 3 will be operated out of priority for approximately 2-3 hours each.

Impact on unit priority
Unit priority is 1,3,4-6 any order, 2 ON and 4-6,3,2,1 OFF. Unit 2 has fixed blades and so is operated last on, second to last off in priority. Unit 1 will be in operation. Testing will require operating units 2 and 3 out of priority for 2-3 hours each.

Impact on forebay/tailwater operation - None

Impact on spill - None

Dates of impacts/repairs – 2 days during week of March 15-18, 2021

Length of time for repairs – 2 to 3 hours each unit, 4 to 6 hours total

Analysis of potential impacts to fish

1. No adult Chinook salmon have been counted at Lower Granite Dam during March 15-18. For steelhead, two-day average counts for the week of 15-18 March ranged 247 to 382 over the past 10 years.

During the early start of the JFF in 2020, a total of 255 juvenile salmonids were collected and bypassed during the week of 15-18 March. Actual number exposed to units 2 and 3 during testing should be lower.

2. Statement about the current year's run: 2021 adult fish runs are expected to be below the 10-year average.
3. Estimated exposure to impact by species and age class. Exposures are estimated to be 0.2% for adult steelhead and 0.01% for juvenile salmonid migrants.
4. Type of impact by species and age class. Minimal impact is expected for adult steelhead as priority unit 1 will be in operation. Minimal impact to juvenile salmonids as relatively few fish are expecting to be passing the dam at the time. Fish passing via the test turbines will experience brief periods of operation below the 1% range.

Summary statement - expected impacts on:

Downstream migrants. Minimal

Upstream migrants (including Bull Trout) - None

Lamprey - None

Comments from agencies

Final coordination results

After Action update (After action statement stating what the effect of the action was on listed species. This statement could simply state that the MOC analysis was correct and the action went as expected, or it could explain how the actual action changed the expected effect (e.g., you didn't need to close that AWS valve after all, so there was no impact of the action). List any actual mortality noted as a result of the action)

Please email or call with questions or concerns.
Thank you,

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