

**OFFICIAL MEMO of COORDINATION (MOC) FOR NON-ROUTINE
OPERATIONS & MAINTENANCE**

COORDINATION TITLE- 23 LGS 12 Unit 1 Brush Rigging Cleaning

COORDINATION DATE- September 25, 2023

PROJECT-Little Goose Dam

RESPONSE DATE- October 2, 2023

Description of the Problem: September periodic maintenance inspections uncovered heavy carbon buildup from the brush rigging components of Units 1 and 2. The brushes provide voltage stabilization serving a critical role in conductivity within the turbine unit. The brush mechanisms are however wearable. As the unit spins friction erodes brush particles, the dust falls, and accumulates within the brush housing. Carbon buildup increases the risk of arc to ground that would severely damage the generator leading to an extended outage to Unit 1. The project would like to take Unit 1 out of operation for 1 day and operate Unit 2 out of priority to clean carbon buildup of Unit 1.

Type of outage required: Priority is unit 1 to unit 6, in order (FPP, Chapter 8, Table LGS-6). The plan is to operate Unit 2 out of priority for 1 day.

Dates of impacts/repairs: Wednesday, October 4, 2023

Length of time for repairs: From 0730 to 1700 hours, 4 October 2023.

Impact on fish facility operation: Operating unit 2 out of unit priority may reduce attraction to fishway entrances. There will be no impact to spill or tailwater elevations.

Analysis of potential impacts to fish:

1. 10-year average passage of adults and juveniles of each affected listed species during dates of impact (Columbia River DART):
October 4 adult counts at Little Goose average 574 Chinook salmon, 3,786 steelhead, and 498 coho salmon.
2. Juvenile salmon and steelhead downstream migration should not be affected by tailrace conditions impacted by unit priority deviation.
3. Statement about the current year's run (e.g., higher or lower than 10-year average – Columbia River DART):
To date the fall Chinook salmon run is slightly above average and the steelhead count is about 73% of the average at Bonneville Dam. Steelhead, coho, and fall Chinook salmon counts at Little Goose Dam are above average to date this year.

4. Estimated exposure to impact of adults and/or juveniles, as appropriate, by species (number or percentage of 10-year average that occurs during dates of impact – Columbia River DART):

Approximately 1.5% fall Chinook salmon, 4.8% steelhead, and 5.6% coho salmon, on average, pass Little Goose Dam on 4 October.

5. Type of impact to adults and/or juveniles, as appropriate, by species (e.g., increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.):

Upriver migrants including Chinook, steelhead, coho, lamprey, and bull trout may be delayed passing the project. The unit 1 outage will occur on a day without spill so there will not be the impact to passage that can occur when the back eddy forms with spill at Little Goose Dam.

Downstream migrants will not be impacted.

Comments from Agencies:

From: Tom Lorz <lort@critfc.org>

Sent: Monday, September 25, 2023 11:32 AM

To: Peery, Christopher A CIV USARMY CENWW (USA) <Christopher.A.Peery@usace.army.mil>

Subject: [Non-DoD Source] Re: 23LMN12 MOC Unit 1 Brush Rigging Cleaning

We are ok with the operation. Starting later is better since unit 1 is better at this time of year, but unit 2 is acceptable.

thanks

tom

Look forward to updates at the next FPOM meeting.

From: Peery, Christopher A CIV USARMY CENWW (USA)

Sent: Monday, September 25, 2023 11:39 AM

To: Tom Lorz <lort@critfc.org>

Subject: RE: 23LMN12 MOC Unit 1 Brush Rigging Cleaning

Tom,

Thanks for the response. I will discuss the later start with the project.

Chris

Final Coordination Results: Consensus Reached

After Action update:

Please e-mail or call with questions or concerns.

Thank you,

Deborah L. Snyder
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Supervisory Fish Biologist
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