

OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 23 IHR 03 – 115 kV line 1 and line 2 outage

COORDINATION DATE- April 4, 2023

PROJECT- Ice Harbor Dam

RESPONSE DATE- April 13, 2023

Description of the problem

Bonneville Power Administration will be performing maintenance on Ice Harbor-Franklin lines No. 1 and No. 2 115 kV to replace the safety marker balls. The marker balls fade over time and must be periodically replaced to alert pilots of the locations of the 115 kV power lines. The replacement of the marker balls requires that the No. 1 and No. 2 115 kV lines be de-energized. Units 1, 2, and 4 will be unavailable for operation with No. 1 and No. 2 lines out of service (unit 3 has been out of service for the runner replacement). Unit 1 will be operating at speed-no-load for station service. This is needed because, in the event of a loss to line 3, unit 1 station service is the only way to restart powerhouse units as Ice Harbor Dam does not have an emergency generator like at other projects. This outage was also posted in the FPP Appendix A, Section 6.1.3.

The outage is requested for 14 April, 2023, 0630 to 1700 hrs.

Type of outage required

Impact on facility operation (FPP deviations)

Units 5 and 6 will be available for normal operation and Unit 1 will be available for station service.

Impact on unit priority

Unit 6 will be the priority unit, followed by unit 5. Normal unit priority during the fish passage season is unit 1, 2, 3, 6, 4, then 5. Unit 6 will be operating within the 1% operation efficiency range to meet minimum generation requirements. Some attraction flow will come from Unit 1 while providing station service.

Impact on forebay/tailwater operation

There is no impact expected on forebay and tailwater levels.

Impact on spill

The project is spilling up to 125% total dissolved gas saturation for fish passage. River inflow at the project is projected to be about 43 kcfs on April 14, based on the April 3 STP forecast. Most of the outflow will be through the spillway, with one turbine unit operating for minimum power generation and unit 1 for station service.

Dates of impacts/repairs

April 14, 2023.

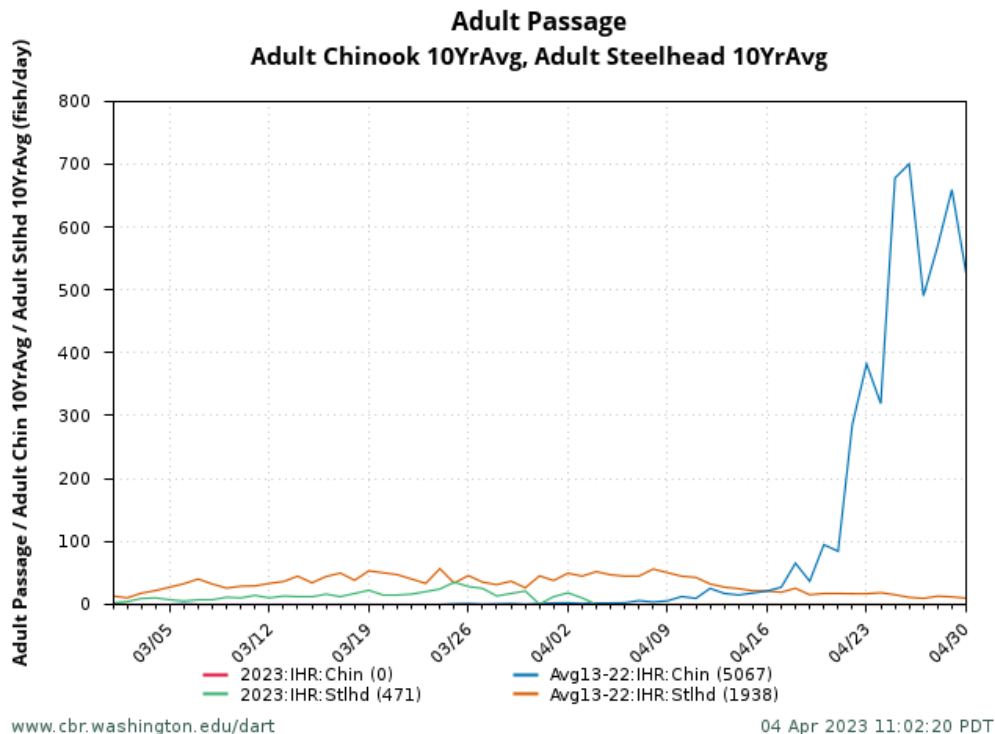
Length of time for repairs

From 0630 hours to 1700 hours.

Analysis of potential impacts to fish

1. 10-year average passage by run during the period of impact for adults and juvenile listed species, as appropriate for the proposed action and time of year;

The average numbers of adult fish counted passing the dam on April 14 are 15 chinook and 25 steelhead (see graph below).



2. Statement about the current year's run (e.g., higher or lower than 10-year average);

The numbers of adult steelhead and Chinook counted since March 1 have been below the 10-year average (see graph above) (counts in March previously occurred in 2013 and 2018). As of April 3, no adult Chinook have passed the count windows yet.

3. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action);

Using the 10-year average, approximately 0.03% of the adult spring chinook run and 0.03% of the steelhead run would be impacted by this action.

4. Type of impact by species and age class (increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.);

With spill occurring and unit 6 operating on April 14, adult salmonids may be more attracted to the north powerhouse entrance and the north fish ladder entrance, rather than to the south shore entrance. There may be a slight passage delay for fish that are migrating along the south shore to find the south shore entrance or to utilize the other entrances.

The impact on juvenile salmon and steelhead kelts or adult salmonid overshoots will be minimal as most of flow will be through the spillway.

Summary statement - expected impacts on:

Downstream migrants

There will be minimal impact on smolts and adult fish migrating downstream.

Upstream migrants (including Bull Trout)

Adult salmonids may experience some passage delay.

Lamprey

There are very few adult lamprey passing the project in April. The impact on juvenile lamprey would be similar to the impact on smolts and would be minimal.

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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