Fish Passage Plan (FPP) Change Form

Change Form # & Title: 24IHR009 – Unit outages for fish-related equipment during high flows

Date Submitted: 27-DEC-2023 **Project**: Ice Harbor

Requester Name, Agency: Ken Fone, USACE

Final Action: FINALIZED 1-FEB-2024

FPP SECTION: 4.3.9. Turbine Unit Outages during High Flows

JUSTIFICATION FOR CHANGE: To clarify subsection 4.3.9.4.

PROPOSED CHANGE: Edits to existing FPP text in "track changes".

4.3. <u>Turbine Unit Maintenance.</u>

- **4.3.9. Turbine Unit Outages during High Flows.** During high spring flows, turbine unit outages for NERC regulatory requirements, inspecting fish screens, repairing research equipment (e.g., hydroacoustic or radio telemetry equipment), and/or other fish items may cause increased spill in order to maintain reservoir levels within operating ranges. This may result in TDG exceeding standards. It is important that this work be conducted when scheduled to ensure facilities are working correctly and not injure migrating fish, and that important fish research data are collected. To facilitate this work, reservoir storage may be utilized to minimize impacts from taking units out of service and increasing spill.
 - **4.3.9.1.** At Ice Harbor, this special operation may take place when flows are above 100 kcfs or when increased spill will result in TDG exceeding standards. The activities covered under these operations will be coordinated with TMT whenever possible.
 - **4.3.9.2.** For scheduled inspection or repair of research equipment, reservoirs shall be drafted to MOP and allowed to fill 1' above the MOP range as work is accomplished. After the work, reservoirs will slowly be drafted back to MOP.
 - **4.3.9.3.** When inspection or repair work can be scheduled ahead of time, Project personnel shall schedule unit outages through the approved outage scheduling procedure by noon Tuesday of the week prior to the outage. Project personnel shall also notify CENWW-OD-T and RCC of the intended work by the same time. RCC will coordinate the work activities through TMT, then issue a teletype issuing instructions to project and BPA personnel for the scheduled work, as follows:
 - **i.** Spill will be increased by one gate stop (about 1.7 kcfs) above passing inflow to slowly lower the Ice Harbor pool to MOP prior to scheduled work taking place.
 - **ii.** When the work takes place, additional spill will not be provided and the reservoir will be allowed to refill until the reservoir is 1' above MOP (a 2' pondage from where the pool was when work started). At this point, screen inspections shall stop. (At Snake River projects, this should allow about one normal workday for the scheduled work.)

- **iii.** At the conclusion of the work, the reservoir shall be drafted back down to MOP utilizing a one spillbay stop increase above passing inflow.
- iv. If work, such as screen inspections, is incomplete, Project personnel shall schedule another turbine unit outage for a date where it can be implemented.
- **4.3.9.4.** If the required work on fish-related equipment is of an emergency nature that does not normally require the unit out of service (but not required in the FPP for unit operatione.g., such as a failed hydroacoustic transducer versus failed fish screen) and cannot wait for the above process to be implemented, Pproject personnel shall notify CENWW-OD-T and RCC to get approval to do the work. If approved, the unit shall be taken out of service and the reservoir level may be operated up to 1' above MOP. At this point, the unit must be returned to service and the reservoir drafted back to MOP using one spillbay stop setting above passing inflow.

COMMENTS: None

RECORD OF FINAL ACTION: Finalized at the FPOM FPP meeting 1-FEB-2024