# Fish Passage Plan (FPP) Change Form

**Change Form # & Title**: 22BON001 – Units 1 and 10 Maintenance

**Date Submitted**: 1/26/2022

**Project**: Bonneville Dam

**Requester Name, Agency**: Scott Bettin, BPA

**Final Action: APPROVED 10-February-2022**

**FPP Section**: BON section 4.3.2 – Turbine Maintenance

**Justification for Change**: The current language restricts maintenance of priority units to the in-water work period. This change form would allow maintenance of Powerhouse 1 priority units 1 and 10 to occur in the months of July and August when there are no units running at Powerhouse 1 due to spill and Powerhouse 2 priority. Providing the project this flexibility will allow for other fish-related maintenance to occur during the winter in-water work period.

**Proposed Change**:

**4.3. Turbine Unit Maintenance**

**4.3.2.** Priority unit maintenance will be scheduled for the winter maintenance period or when there are few fish passing the project, to the extent possible. Priority units 1,10 , 11, and 18 will be scheduled for any necessary extended outages between December 1 and April 30. In addition, Unit 10 maintenance outages may be scheduled from July 15 through August 31 when Powerhouse 1 units are not operating. Non-priority units should not be scheduled for routine or extended outages during this time if it will delay or conflict with priority unit maintenance. When PH1 is operating, Units 1 and 10 provide important attraction flow for adult fish and helps pass juvenile fish downstream. Therefore, long-term outages of Unit 1 and 10 will be avoided during the juvenile passage season until after adult fall Chinook and coho migration ends in late October.

**Comments**:

 FPOM FPP Meeting 1/27/22:

Lorz – ok w/ Unit 10. Unit 1 provides egress conditions. Is Unit 2 similar?

Conder - would like to think on this more. Units 1 and 10 critical for egress. Are adjacent units sufficient? Unit 2 could create backeddy. Probability of PH1 operating in July/August is unusual but not unheard of. In early July, last seven years, there have been two instances operating PH1 where this would have resulted in operating non-priority units during peak subyearling passage. If there's an eddy in the sluiceway, that would have adverse impacts. Need to ensure this isn't a step backwards from what was consulted on in the BiOp. Need evidence that adjacent units maintain good egress. Intent of this change form is to avoid spill during the winter, which isn't a good excuse.

Derugin - in past 8 years during high flows, those units did run in first couple weeks of July. Could push start date to July 15. Will check with Guajardo to see if that provides enough time for work.

Mackey - U3 is next in priority after U1. In the past it was acceptable to go with U3 if U1 was out. It probably won't be as good but reasonable to assume it's adequate. Could add language to make it flow dependent.

Lorz - is just Unit 10 ok and leave U1 maintenance in winter?

Conder - if you can ensure flows won't need to pass PH1 during this time, then ok; otherwise it's a step backward for fish.

Ebel - is it possible to establish a flow trigger?

Conder - roughly flows above 200 would need PH1 with summer spill and PH2 mid-range restrictions. Once PH2 gatewell issues resolved, this change form is ok.

Wright – currently, the PH2 mid-range restrictions go away August 1.

Lorz - when will this be needed? Unit 1 is being done this year so it won’t be an issue. How about starting with U10, then add Unit 1 after the PH2 mid-range fixes are done.

PENDING more review and discussion at the February 10 FPOM.

FPOM 2/10/22:

Lorz and Conder are ok with Unit 10 but want to hold off on allowing Unit 1 until after the PH2 FGE mods are complete.

Bettin wants to make sure we keep this on the list for conversation next year.

**Record of Final Action**:

Approved as revised on Jan 27 (changed start date to July 15) and Feb 10 (deleted Unit 1).