FPP Change Form

Change Request Number: 11BON001

Date: June 2, 2010 - withdrawn on 09 September 2010 **Proposed by:** Sean Tackley and Jon Rerecich - NWP

Proposed Change: Reduce fish unit output at night to reduce entrance head to 0.5' at

Bonneville Second Powerhouse fishway entrances.

FROM: (Bonneville Dam) 2.5.4. Powerhouse Two.

a. Operate all north (NUE and NDE) and south (SUE and SDE) entrances. Operate weir crests at elevation 1' (fully lowered) for tailwater elevations up to 14'. For tailwater elevations greater than 14', operate weir crest 13' or greater below tailwater.

b. Operate all 12 active powerhouse floating gate fishway entrances.

TO: (Bonneville Dam) 2.5.4. Powerhouse Two.

- **a.** During daytime spill hours (see Table BON-5), operate all north (NUE and NDE) and south (SUE and SDE) entrances. Operate weir crests at elevation 1' (fully lowered) for tailwater elevations up to 14'. For tailwater elevations greater than 14', operate weir crest 13' or greater below tailwater.
- **b.** Operate all 12 active powerhouse floating gate fishway entrances.
- **c.** Lamprey Operations, June 1 August 31: During nighttime spill hours (see Table BON-5), reduce fish unit output to operate all north (NUE and NDE) and south (SUE and SDE) entrances at 0.5' of entrance head. To ensure proper function of the fish units, B2 fish unit output can be further reduced or placed on standby to float debris as necessary between 2200-0400.

Reason for Change: The purpose of this change is to increase lamprey entrance efficiency by lowering B2 fishway velocities. This proposed change is based on evaluations by the University of Idaho (Johnson et al. 2010). Impacts of trash removal/floating must be addressed in FPP change and recommendation. Trash is floated, as needed, to maintain head on fish units. Fish units are turned off and debris is passed via main units (typically MU18). The existing trash rakes do not effectively clear debris, so this is the only practical cleaning technique available at this time. Reducing entrance head to 0' (to float debris) is detrimental to lamprey attraction, entrance efficiency, and dam passage times, so this should be done only as necessary to minimize impacts on lamprey passage. Operators should try to float debris late in the night (between 0200 and 0400) to avoid peak nighttime migration periods.

Comments from others: At the June meeting, FPOM approved implementing the action but not yet changing the FPP.

Record of Final Action: - withdrawn on 09 September 2010