

**Change Request Number: 11BON012**

**Date:** December 15<sup>th</sup>, 2010

**Proposed by:** David Benner, FPC

**Location of Change-** BON 4.3.2.1.c

**Proposed Change: 4.** If all auxiliary water systems fail or malfunction, close the NDE and SDE and floating orifice gates (if longterm outage). Operate both SUE and NUE to extent possible while still maintaining a minimum of 1 ft head differential. If a minimum of 6ft gate depth cannot be maintained at both SUE and NUE with a minimum of 1 ft of head differential- then close SUE and block collection channel (if possible) and operate NUE to maximum depth possible while still maintaining at least 1 ft head differential at NUE. While under this configuration, power generation at Powerhouse Two will be minimized to the extent practicable to reduce fish attraction into this area unless Powerhouse One facilities are dewatered.

**Approved change:**

1. If either or both of the fishway auxiliary water turbines is unable to provide water sufficient to meet full criteria, the adult facilities will be operated according to **Table Bon-13**, Emergency Operations for Bonneville Powerhouse Two AWS Systems Operations or until a fishway head of 1' is achieved.

2. **Table Bon-13** is a guide for configuring turbine flows, floating orifices, diffuser gates, and main gates during emergency situations when one of the fish turbines has failed or been taken out of service. **Table BON-13** guidance should be followed to the extent practicable, and shore entrance weirs should be raised in increments or closed as needed to maintain the proper fishway head.

3. If both of the fish unit turbines fail between September 01 and March 31, and repairs cannot be made within 8 hours, coordination with FPOM will occur to develop operational guidelines that may include alternative powerhouse priority operations.

~~4. If all auxiliary water systems fail or malfunction, close the NUE, SUE, and SDE and raise the NDE weir crest to 6' below tailwater with the floating orifice gates open. Maintain this configuration until the system is repaired. While under this configuration, power generation at Powerhouse Two will be minimized to the extent practicable to reduce fish attraction into this area unless Powerhouse One facilities are dewatered.~~

~~5.~~ Powerhouse Two adult fishway diffusion system valves A3 and A4 were found damaged and have been removed. These valves were designed to be closed when tailwater drops below 11' and 9', respectively. Even though the valves cannot be closed, velocity in the channel has remained in criteria.

**Reason for Change:** Under a long term outage, floating orifice gates should be closed to provide more water at other main entrances. The upstream entrances are closer to operating units, the attraction benefit from these units would be greatest at the upstream entrances. Table **Bon-13** has all floating orifice gates closed under emergency conditions.

**Comments from others:**

USFWS- Support, unless data is provided to contradict the change, then more discussion at FPOM would be needed.

**Record of Final Action:** delete section c.4 and change c.1 to include both fish units failing. Mackey will ask BON how long it takes to install the stab plates. Include on Feb FPOM agenda. Finalized at February FPOM.