FPP Change Form

Change Request Number: 09TDA004

Date: 11/5/2008

Proposed by: Project Fisheries Location of Change: TDA 5.1

Proposed Change: Current language: "Throughout the juvenile fish passage season, either turbine unit 1 or unit 2 or both units will operate during daylight hours unless specially coordinated with FPOM....Reverse the order when reducing load."

Proposed changes:

Through the juvenile fish passage season, April 1 through November 30, either turbine unit 1 or unit 2 or both units will operate during daylight hours unless specially coordinated with FPOM. In order to provide favorable fish passage conditions while meeting transmission line needs, the main powerhouse turbine units will operate in the following priority order: Unit 1 then Unit 2 at the west end of the powerhouse, then place every other available unit on line until the east end of the powerhouse is reached. Then go back to the west end of the powerhouse and place the remaining available units on line, from west to east, until all the available units are on line. Reverse the order when reducing load. If necessary to exercise a less frequently used turbine, July 1 through November 30 (low flow period) it is permitted to put any of the east end units #15-22 on line before the west units #9-14 as long as the overall random units' distribution is achieved across the entire powerhouse (no units are to be bunched up on daily or long term basis.)

Reason for Change: To highlight and clarify the fish passage season with the bold type.

The Dalles Turbine Unit Priority had been established to maximize smolts entrainment into the Ice/Trash sluiceway (= surrogate juvenile bypass at powerhouse) through skimmer gates. However, it needs to be mentioned that in spite of the extensive, multi-year research efforts we have never been able to identify clearly a pattern which would be conducive to achieving that goal. In fact, after a few years of testing of the western loading of the powerhouse (a theory based primarily on the hydraulic conditions which exist in the forebay) it became evident that a random unit loading which existed originally (before specific testing) was the best option to use.

The Dalles Operations and Maintenance need to distribute the turbine usage more evenly during the low flow periods since without this change the east end's turbines are getting disproportionately higher usage as compared with the west end's ones. And from the fisheries perspective, this change doesn't have any impact on the juvenile fish passage through the Ice/Trash Sluiceway.

Comments from others: ok with the idea, but wanted better clarity on which units. **Record of Final Action:** Bettin will provide blocks of units. Mackey will re-write and re-submit. New change form is 08TDA004-a