

FPP Change Form

Change Request Number: 10IHR001

Date: August 5, 2009

Proposed by: Scott Bettin (BPA), Greg Moody, Mark Plummer, Scott Thoren (USACE)

Proposed Change: Revise section 4.1 after the Sacajawea substation transformer and 500kV tie are back on-line.

TO: 4.1. Unit Operation. When in operation, Units will be operated to enhance adult and juvenile fish passage from March 1 through November 30. During this time period Units will be operated as needed to meet generation requirements in the priority order shown in **Table IHR-4**. Model studies of Ice Harbor Dam show that spilling at lower river flows can cause eddying in front of the powerhouse. To provide the best fish passage conditions during periods of spill, it is important that the Units operate in a specific operating order to minimize eddying conditions. The original and desired unit prioritization is 1, 3, 6, 4, 2, 5. Unit 6 transformer has an internal fault and is generating gases that are indications of arcing and the levels are increasing with time, so it is desired to run this unit in a last on, first off.

With the new Sacajawea 500/115kV transformer in service which is connected to the Ice Harbor-Franklin No. 2 115kV line, IHR should not be run as a single or two unit project if that unit(s) is unit 3 and / or 4 without switching those units to the Ice Harbor-Franklin No. 3 115kV line, disconnecting the Ice Harbor-Franklin No. 2 115kV line from Ice Harbor and disabling the transfer trip for the Ice Harbor-Franklin No. 2 115kV line at Ice Harbor. This switching is necessary to prevent the loss of all Ice Harbor generation and the Sacajawea transformer if there is an outage of the Ice Harbor-Franklin No. 2 115kV line.

If single unit operation is necessary and switching has not occurred in the yard run unit 1, 2, 5, 6. Running units 3 and 4 alone on the Ice Harbor-Franklin No. 2 115kV line can only occur if the powerhouse operator can accomplish the needed switching. .

Table IHR-4. Unit operating priority for Ice Harbor Dam.

Season	Time of Day	Unit Priority*
All year-single unit operation w/o switching Switching must occur to return to normal operating priority outlined below	24 hours/day	1,2,5,6
March 1-November 30	24 hours/day	1,3,4,2,5 and 6
December 1 – February 28	24 hours	Any Order for multiple unit operation

Reason for Change: Current unit priority is 3, 1, 4, 5, 2, 6.

Comments from others: Martin Ahmann, USACE, “The 1, 3, 4, 5, 2, 6 pattern looks good, given the constraints of units 2 and 6. The 2, 5, 6 pattern is less than desirable but given the circumstances would appear to be as good as we can get; I think for juveniles, it should provide good conditions for spill passed fish and acceptable conditions for by-passed fish but would be concerned with adult passage. Should probably pay close attention to adult passage monitoring should the 2, 5 ,6 pattern ever be employed.”

Record of Final Action: FPOM unanimously approved at 20 August 2009 FPOM meeting.