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United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137



November 3, 2009

FAXOGRAM: Water Order Change

To: Chief, Power Supply and Billing Division, WAPA, Watertown, South Dakota
Attention: F-6001
Chief, Power Dispatching Branch, WAPA, Loveland, Colorado
Attention: J-4120
Facilities Manager, Hardin, Montana
Attention: MT-300: Tom Tauscher
Project Manager, Mills, Wyoming
Attention: WY-4000, WY-4100, WY-6400
Assistant Superintendent, National Park Service, Lovell, Wyoming
Attention: Jim Staebler

From: Reservoir and River Operations, Billings, Montana

Subject: **Yellowtail Water Release Order - BHR No. 10-10**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3639.41; Storage: 1,062,651 acre-feet; River Release: 3,000 cfs; Inflow: 2,440 cfs;

GENERAL COMMENTS:

The algae growth in the Bighorn River continues to decrease significantly. Power generation indicates actual river flows are higher than anticipated. To adjust for the variation in flows, the following operation change is required at Yellowtail Dam and Powerplant, applying a new shift of -0.48 to the river gage height.

NOTE: This is the time period when fish are less affected by high levels of nitrogen gas super-saturation. Since mixing flows through the spillway gates and the sluice gates is not required at this time, it is still desirable to provide a mixing flow of approximately 75% through the spillway gates and 25% through the sluice gates whenever the level of the Afterbay allows for flows to be released through the spillway gates.

YELLOWTAIL TURBINE RELEASE:

At 1600 hour on Wednesday, November 4, 2009:

Maintain average daily turbine release at $\approx 2,930$ cfs ($\approx 1,910$ MW-Hrs/day using 36.8 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1600 hour on Wednesday, November 4, 2009:

Maintain diversions to the Bighorn Canal at 0 cfs.

Maintain river release at 3,000 cfs (decrease gage height to 60.87 & apply new shift of -0.48).

Maintain total release from the Afterbay at 3,000 cfs.

/S/ Tim H. Felchle