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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



April 5, 2006

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. 06-09**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3612.65; Storage: 820,487 acre-feet; River Release: 2,500 cfs; Inflow: 1,850 cfs;

GENERAL COMMENTS:

Recent flow measurements indicates actual river flows are lower than anticipated. To adjust for the variation in river flows and continue conserving storage in Bighorn Lake, the following operation change is required at Yellowtail Dam and Powerplant.

NOTE: This is the time period when fish are more susceptible to high levels of nitrogen gas super-saturation. To provide a more desirable mixing flow of approximately 75% through the spillway gates and 25% through the sluice gates to maintain the total gas super-saturation levels at safe limits, the minimum Afterbay elevation should be maintained at or above elevation 3183 whenever possible. This is only a soft limit and may be deviated from during special or emergency operations.

TURBINE RELEASES:

At 1800 hour on Wednesday, April 5, 2006:

Maintain average daily turbine release at 2,430 cfs (\approx 1,455 MW-Hrs/day using 40.1 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1800 hour on Wednesday, April 5, 2006:

Maintain diversions to the Bighorn Canal at 0 cfs.

Increase river gage height to 60.36 and apply a new shift of -0.36 (flow = 2,500 cfs).

Maintain total release from the Afterbay at 2,500 cfs.

/S/ Tim H. Felchle