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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



June 15, 2007

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. 07-24**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3635.83; Storage: 1,020,281 acre-feet; River Release: 1,500 cfs; Inflow: 3,865 cfs;

GENERAL COMMENTS:

Inflows to Bighorn Lake are slowly declining but continue to remain above 3,800 cfs. As a result, storage in Bighorn Lake continues to fill at a rate of about 0.4 feet per day. With the reservoir level about 4 feet below the top of the joint-use pool, the following operation change is required at Yellowtail Dam and Powerplant to slow the rate of fill.

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 2000 hour on Friday, June 15, 2007:

Increase average daily turbine release to 1,680 cfs (\approx 1,005 MW-Hrs/day using 43.6 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 2000 hour on Friday, June 15, 2007:

Maintain diversions to the Bighorn Canal at 0 cfs (gage height = 71.02 with -0.19 shift).

Increase river release to 1,750 cfs (gage height = 59.42 with a shift of -0.08).

Increase total release from the Afterbay to 1,750 cfs.

/S/ Tim H. Felchle