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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



May 3, 2012

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: Valerie Newman

From: Reservoir and River Operations, Billings, Montana

Subject: **Yellowtail Water Release Order - BHR No. 12-29**

CURRENT RESERVOIR CONDITIONS

Elevation: 3615.49 Storage: 797,807 acre-feet; River Release: 2,500 cfs; Inflow: 2,695 cfs;

GENERAL COMMENTS:

The gate refurbishment Contractor will be removing temporary stoplogs and rail guides on the Afterbay radial gates 2 & 3 and will install the rail guides in the inlet of radial gates 4 & 5. To accomplish this work, the level of the Afterbay reservoir must be drawn down and maintained no higher than elevation 3178.5 and no lower than elevation 3175 during 0800 hour on May 7 through 0800 hour on May 09. The BIA has also requested an increase in diversions to the Bighorn Canal to meet irrigation demands. In response, the following operations are required at Yellowtail Dam, powerplant, and Afterbay Dam.

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 and thereby maintain the total gas super-saturation levels within safe limits, the minimum Afterbay elevation should be maintained at or above elevation 3183.5 whenever possible, except for the special drawdown scheduled above. This is a soft limit and may be deviated from during special or emergency operations required to meet energy demands.

YELLOWTAIL TURBINE RELEASE:

At 1700 hour on Thursday, May 3, 2012:

Increase average daily turbine release to 2,850 cfs (\approx 1,660 MW-Hrs/day using 41.2 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1700 hour on Thursday, May 3, 2012:

Increase diversions to the Bighorn Canal to 420 cfs (gage height = 73.36 with +0.57 shift).

Maintain river release at 2,500 cfs (gage height = 60.14 with -0.14 shift).

Increase total release from the Afterbay to 2,920 cfs.

/S/ Tim H. Felchle