



IN REPLY REFER TO: MT-450

United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137



April 23, 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. 12-27**

CURRENT RESERVOIR CONDITIONS

Elevation: 3616.27 Storage: 802,980 acre-feet; River Release: 2,500 cfs; Inflow: 2,300 cfs;

GENERAL COMMENTS:

Recent streamflow measurements conducted by the USGS has indicated actual river and canal flows vary from the measured flows. To adjust for the variation in flows, 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. This is a soft limit and may be deviated from during special or emergency operations required to meet energy demands. With contract work continuing on refurbishment of the Afterbay spillway radial gates, the Afterbay must also be maintained no higher than elevation 3186.

YELLOWTAIL TURBINE RELEASE:

At 1000 hour on Monday, April 23, 2012:

Increase average daily turbine release to 2,750 cfs (\approx 1,735 MW-Hrs/day using 38.0 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1000 hour on Monday, April 23, 2012:

Increase diversions to the Bighorn Canal to 320 cfs (maintain gage height @ 72.66 with +0.57 shift).

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

Increase total release from the Afterbay to 2,820 cfs.

/S/ Tim H. Felchle