



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



May 20, 2008

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. 08-18**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3610.23; Storage: 804,679 acre-feet; River Release: 1,500 cfs; Inflow: 3,585 cfs;

GENERAL COMMENTS:

The BIA called and requested an increase in diversions to the Bighorn Canal. In response, the following operation changes are required at Yellowtail Dam, Powerplant, and Afterbay as follows.

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 1130 hour on Tuesday, May 20, 2008:

Increase average daily turbine release to 1,780 cfs (\approx 1,010 MW-Hrs/day using 42.3 cfs/mw).

At 1600 hour on Tuesday, May 20, 2008:

Increase average daily turbine release to 1,830 cfs (\approx 1,038 MW-Hrs/day using 42.3 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1130 hour on Tuesday, May 20, 2008:

Increase diversions to the Bighorn Canal to 350 cfs (gage height = 73.45 with 0.0 shift).

Maintain river release at 1,500 cfs (gage height = 59.54 with a shift of -0.05).

Increase total release from the Afterbay to 1,850 cfs.

At 1600 hour on Tuesday, May 20, 2008:

Increase diversions to the Bighorn Canal to 400 cfs (gage height = 73.80 with 0.0 shift).

Maintain river release at 1,500 cfs (gage height = 59.54 with a shift of -0.05).

Increase total release from the Afterbay to 1,900 cfs.

/S/ Tim H. Felchle