



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



August 21, 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. 08-49**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3639.37; Storage: 1,062,158 acre-feet; River Release: 2,500 cfs; Inflow: 2,510 cfs;

GENERAL COMMENTS:

The BIA called and reported a breach in the Bighorn Canal and requested an immediate reduction in diversions to the canal. To avoid making any changes in power turbine releases and assist the BIA in making repairs to the Bighorn Canal, the following operation changes are 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.

YELLOWTAIL TURBINE RELEASE:

At 1530 hour on Wednesday, August 20, 2008:

Maintain average daily turbine release at $\approx 2,825$ cfs ($\approx 1,840$ MW-Hrs/day using 36.8 cfs/mw).

At 1630 hour on Wednesday, August 20, 2008:

Maintain average daily turbine release at $\approx 2,825$ cfs ($\approx 1,840$ MW-Hrs/day using 36.8 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1530 hour on Wednesday, August 20, 2008:

Decrease diversions to the Bighorn Canal to 295 cfs (gage height = 73.40 with -0.37 shift).

Increase river release to 2,600 cfs (increase gage height to 60.77 & apply shift of -0.69).

Maintain total release from the Afterbay at 2,895 cfs.

At 1630 hour on Wednesday, August 20, 2008:

Decrease diversions to the Bighorn Canal to 195 cfs (gage height = 72.54 with -0.37 shift).

Increase river release to 2,700 cfs (gage height = 60.85 with shift of -0.69).

Maintain total release from the Afterbay at 2,895 cfs.

/S/ Tim H. Felchle