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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



September 19, 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
Area 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. 07-43**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3629.59; Storage: 955,600 acre-feet; River Release: 1,750 cfs; Inflow: 1,950 cfs;

GENERAL COMMENTS:

The BIA called and requested reductions in diversions to the Bighorn Canal. This FAXOGRAM confirms the operation changes that were made at Yellowtail Dam and Powerplant on September 12 and September 18, 2007. In response, the following operation changes were 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.

TURBINE RELEASES:

At 1330 hour on Wednesday, September 12, 2007:

Decrease average daily turbine release to 1,905 cfs (≈ 1,230 MW-Hrs/day using 37.2 cfs/mw).

At 1430 hour on Tuesday, September 18, 2007:

Decrease average daily turbine release to 1,880 cfs (≈ 1,210 MW-Hrs/day using 37.2 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1330 hour on Wednesday, September 12, 2007:

Decrease diversions to Bighorn Canal to 225 cfs (gage height = 72.80 with a shift of -.35).

Maintain river release at 1,750 cfs (gage height = 59.45 with a shift of -0.11).

Decrease total release from the Afterbay to 1,975 cfs.

At 1430 hour on Tuesday, September 18, 2007:

Decrease diversions to Bighorn Canal to 200 cfs (gage height = 72.56 with a shift of -.35).

Maintain river release at 1,750 cfs (gage height = 59.45 with a shift of -0.11).

Decrease total release from the Afterbay to 1,950 cfs.

/S/ Tim H. Felchle