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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 28, 2006

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. 06-43**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3602.60; Storage: 759,116 acre-feet; River Release: 1,500 cfs; Inflow: 2,100 cfs;

GENERAL COMMENTS:

With the 2006 irrigation season coming to a close, the BIA has requested all diversions to the Bighorn Canal to be gradually reduced to 0 cfs by October 3. In response, 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.

TURBINE RELEASES:

At 0900 hour on Monday, October 2, 2006:

Decrease average daily turbine release to 1,520 cfs (≈ 820 MW-Hrs/day using 44.4 cfs/mw).

At 0900 hour on Tuesday, October 3, 2006:

Decrease average daily turbine release to 1,430 cfs (≈ 775 MW-Hrs/day using 44.4 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 0900 hour on Monday, October 2, 2006:

Decrease diversions to the Bighorn Canal to 90 cfs (gage height = 71.78 using a shift of -0.81).

Maintain river release at 1,500 cfs (gage height = 60.08 using shift of -1.01).

Decrease total release from the Afterbay to 1,590 cfs.

At 0900 hour on Tuesday, October 3, 2006:

Decrease diversions to the Bighorn Canal to 0 cfs (gage height = 69.31 using a shift of -0.81).

Maintain river release at 1,500 cfs (gage height = 60.08 using shift of -1.01).

Decrease total release from the Afterbay to 1,500 cfs.