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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 7, 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. 07-42**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3629.81; Storage: 957,700 acre-feet; River Release: 1,750 cfs; Inflow: 1,420 cfs;

GENERAL COMMENTS:

This FAXOGRAM confirms the operation change that was made at Yellowtail Dam and Powerplant on September 6, 2007, in response to the request made by the BIA for changes in diversions to the Bighorn Canal. To adjust for the variation in flow, the following operation change is 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 1630 hour on Thursday, September 6, 2007:

Decrease average daily turbine release to 1,945 cfs (\approx 1,320 MW-Hrs/day using 35.4 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1630 hour on Thursday, September 6, 2007:

Decrease diversions to Bighorn Canal to 265 cfs (gage height = 73.14 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 2,015 cfs.

/S/ Tim H. Felchle