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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



June 24, 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. 08-31**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3637.00; Storage: 1,033,676 acre-feet; River Release: 9,415 cfs; Inflow: 11,340 cfs;

GENERAL COMMENTS:

Reductions in releases from Boysen and Buffalo Bill Reservoirs continue to be made to better assure these reservoirs of filling to the top of their conservation pool levels in late June or early July. As a result, the inflow into Bighorn Lake has decreased, requiring the following operation change at Yellowtail Dam and Bighorn Lake.

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 1900 hour on Thursday, June 26, 2008:

Decrease average daily turbine release to $\approx 7,530$ cfs ($\approx 6,045$ MW-Hrs/day using 29.9 cfs/mw).

YELLOWTAIL SPILLWAY RELEASE:

At 1900 hour on Thursday, June 26, 2008:

Maintain average daily spillway release @ 0 cfs.

AFTERBAY RELEASE AND OPERATION:

At 1900 hour on Thursday, June 26, 2008:

*Maintain diversions to the Bighorn Canal at 450 cfs (gage height = 74.13 with 0.0 shift).
Decrease release to the Bighorn River to 7,150 cfs (gage height = 62.58 & apply shift of 0.08).
Decrease total release from the Afterbay to 7,600 cfs.*

/S/ Tim H. Felchle