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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



July 14, 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. 08-37**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3642.51; Storage: 1,102,783 acre-feet; River Release: 6,225 cfs; Inflow: 6,520 cfs;

GENERAL COMMENTS:

The BIA called and requested an increase in diversions to the Bighorn Canal. This increase will begin at 2:00pm and the next three scheduled releases from Yellowtail Dam and Bighorn Lake as outlined in water Release Order – BHR No. 08-36 will be adjusted as follows:

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 1400 hour on Monday, July 14, 2008:

Maintain average daily turbine release at $\approx 6,530$ cfs ($\approx 4,975$ MW-Hrs/day using 31.5 cfs/mw).

At 1700 hour on Monday, July 14, 2008:

Decrease average daily turbine release to $\approx 5,930$ cfs ($\approx 4,520$ MW-Hrs/day using 31.5 cfs/mw).

At 0600 hour on Tuesday, July 15, 2008:

Decrease average daily turbine release to $\approx 5,430$ cfs ($\approx 4,135$ MW-Hrs/day using 31.5 cfs/mw).

At 1700 hour on Tuesday, July 15, 2008:

Decrease average daily turbine release to $\approx 4,930$ cfs ($\approx 3,755$ MW-Hrs/day using 31.5 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1400 hour on Monday, July 14, 2008:

Increase diversions to the Bighorn Canal to 425 cfs (gage height = 73.97 with 0.0 shift).

Decrease release to the Bighorn River to 6,175 cfs (gage height = 62.14 & apply shift of 0.08).

Maintain total release from the Afterbay at 6,600 cfs.

At 1700 hour on Monday, July 14, 2008:

Maintain diversions to the Bighorn Canal at 425 cfs (gage height = 73.97 with 0.0 shift).

Decrease release to the Bighorn River to 5,575 cfs (gage height = 61.85 & apply shift of 0.08).

Decrease total release from the Afterbay at 6,000 cfs.

At 0600 hour on Tuesday, July 15, 2008:

Maintain diversions to the Bighorn Canal at 425 cfs (gage height = 73.97 with 0.0 shift).

Decrease release to the Bighorn River to 5,075 cfs (gage height = 61.59 & apply shift of 0.08).

Decrease total release from the Afterbay at 5,500 cfs.

At 1700 hour on Tuesday, July 15, 2008:

Maintain diversions to the Bighorn Canal at 425 cfs (gage height = 73.97 with 0.0 shift).

Decrease release to the Bighorn River to 4,575 cfs (gage height = 61.38 & apply shift of 0.08).

Decrease total release from the Afterbay at 5,000 cfs.

/S/ Tim H. Felchle