



United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137



IN REPLY REFER TO: MT-450

August 10, 2011

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: Valerie Newman

From: Reservoir and River Operations, Billings, Montana

Subject: **Yellowtail Water Release Order - BHR No. 11-83**

CURRENT RESERVOIR CONDITIONS (August 10, 2011; 2:00 p.m.)

Elevation: 3649.80 Storage: 1,160,220 acre-feet; River Release: 8,000 cfs; Inflow: 6,300 cfs;

GENERAL COMMENTS:

Recent streamflow measurements indicate actual river flows are lower than anticipated. In response, Water Release Order BHR No. 11-82 is hereby cancelled and replaced with this Water Release Order. To slow the evacuation of flood storage and reduce high flows in the Bighorn River, the following operation changes are required at Yellowtail Dam, Powerplant, and Afterbay applying a new shift of -0.32 to the river gage height and a -0.56 canal gage height.

YELLOWTAIL TURBINE RELEASE:

At 1600 hour on Thursday, August 11, 2011:

Maintain average daily turbine release at 6,600 cfs ($\approx 5,405$ MW-Hrs/day using 29.3 cfs/mw).

At 1600 hour on Monday, August 15, 2011:

Maintain average daily turbine release at 6,600 cfs ($\approx 5,405$ MW-Hrs/day using 29.3 cfs/mw).

YELLOWTAIL BYPASS RELEASE:

At 1600 hour on Thursday, August 11, 2011:

Decrease releases through the spillway gates to 0 cfs.

Increase releases through the river outlet gates at 500 cfs.

At 1600 hour on Monday, August 15, 2011:

Decrease releases through the spillway gates to 0 cfs.

Decrease releases through the river outlet gates 0 cfs.

AFTERBAY RELEASE AND OPERATION:

At 1600 hour on Thursday, August 11, 2011:

Maintain diversions to the Bighorn Canal at 425 cfs (gage height = 74.52 with -0.56 shift).

Decrease river release to 6,745 cfs (gage height = 62.81 with -0.32 shift).

Decrease total release from the Afterbay to 7,170 cfs.

At 1600 hour on Monday, August 15, 2011:

Maintain diversions to the Bighorn Canal at 425 cfs (gage height = 74.52 with -0.56 shift).

Decrease river release to 6,245 cfs (gage height = 62.58 with -0.32 shift).

Decrease total release from the Afterbay to 6,670 cfs.

SPECIAL AFTERBAY OPERATION REQUIREMENT:

Maintain the level of the Afterbay at or above elevation 3184.5 until further notice. It is also important to maintain the river stage within ± 0.06 feet of the river stage set point value.

/S/ Tim H. Felchle