



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

June 3, 2014

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-6040
Assistant Superintendent, National Park Service, Lovell, Wyoming
Attention: Valerie Newman

From: Reservoir and River Operations, Billings, Montana /s/ Clayton R. Jordan

Subject: **Yellowtail Water Release Order - BHR No. 14-50**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3613.30; Storage: 783,808 acre-feet; River Release: 8,320 cfs; Inflow: 12,085 cfs;

GENERAL COMMENTS:

Inflows into Bighorn Lake are starting to decline. Releases to the Bighorn River will be reduced to conserve storage and control the rate of fill. As a result, the following operations are required at Yellowtail Dam and Powerplant.

SPECIAL NOTE: To provide the proper mixing of water releases to the Bighorn River in attempt to minimize PSAT levels, it is desirable to maintain the Yellowtail Afterbay Reservoir at or above elevation 3186.0 feet and provide a mixing flow of approximately 85% through the spillway gates and 15% through the sluice gates, plus or minus 5%.

YELLOWTAIL BYPASS RELEASE:

At 1600 hour on Tuesday, June 3, 2014:

Decrease release through the spillway gates to \approx 917 cfs.

At 1600 hour on Wednesday, June 4, 2014:

Decrease release through the spillway gates to \approx 500 cfs.

At 1600 hour on Thursday, June 5, 2014:

Decrease release through the spillway gates to 0 cfs.

YELLOWTAIL TURBINE RELEASE:

At 1600 hour on Tuesday, June 3, 2014:

Maintain average daily turbine release at 7,200 cfs (\approx 5,450 MW-Hours/day using 31.7 cfs/mw).

At 1600 hour on Wednesday, June 4, 2014:

Maintain average daily turbine release at 7,200 cfs (\approx 5,450 MW-Hours/day using 31.7 cfs/mw).

At 1600 hour on Thursday, June 5, 2014:

Maintain average daily turbine release at 7,200 cfs (\approx 5,450 MW-Hours/day using 31.7 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 1600 hour on Tuesday, June 3, 2014:

Maintain diversions to the Bighorn Canal at 367 cfs (gage height = 73.17 with a -0.22 shift).

Decrease river release to 7,820 cfs (maintain gage height at 62.84 with a +0.11 shift).

Decrease total release from the Afterbay to 8,187 cfs.

At 1600 hour on Wednesday, June 4, 2014:

Maintain diversions to the Bighorn Canal at 367 cfs (gage height = 73.17 with a -0.22 shift).

Decrease river release to approximately 7,403 cfs (maintain gage height at 62.66 with a +0.11 shift).

Decrease total release from the Afterbay to 7,770 cfs.

At 1600 hour on Thursday, June 5, 2014:

Maintain diversions to the Bighorn Canal at 367 cfs (gage height = 73.17 with a -0.22 shift).

Decrease river release to 6,903 cfs (maintain gage height at 62.46 with a +0.11 shift).

Decrease total release from the Afterbay to 7,270 cfs.