



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

May 13, 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/ Tim H. Felchle

Subject: **Yellowtail Water Release Order - BHR No. 14-43**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3604.06; Storage: 731,229 acre-feet; River Release: 7,500 cfs; Inflow: 7,810 cfs;

GENERAL COMMENTS:

To continue preparation for the anticipated spring snowmelt runoff, releases out of Boysen and Buffalo Bill Reservoirs are being gradually increased. In response, the releases out of Yellowtail Dam will also be increased. As a result, the following operations are required at Yellowtail Dam and Powerplant and Yellowtail Afterbay Dam.

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 1500 hour on Tuesday, May 13, 2014:

Increase release through the spillway gates to 4,280 cfs.

At 1500 hour on Wednesday, May 14, 2014:

Increase release through the spillway gates to 4,780 cfs.

YELLOWTAIL TURBINE RELEASE:

At 1500 hour on Tuesday, May 13, 2014:

Maintain average daily turbine release at 3,750 cfs (\approx 2735 MW-Hours/day using 32.9 cfs/mw).

At 1500 hour on Wednesday, May 14, 2014:

Maintain average daily turbine release at 3,750 cfs (\approx 2735 MW-Hours/day using 32.9 cfs/mw).

Restrict and limit turbine releases to 2-unit capacity.

AFTERBAY RELEASE AND OPERATION:

At 1500 hour on Tuesday, May 13, 2014:

Maintain diversions to the Bighorn Canal at 100 cfs (gage height = 70.67 with 0.00 shift).

Increase river release to 8,000 cfs (gage height = 62.84 with a +0.18 shift).

Increase total release from the Afterbay to 8,100 cfs.

At 1500 hour on Wednesday, May 14, 2014:

Maintain diversions to the Bighorn Canal at 100 cfs (gage height = 70.67 with 0.00 shift).

Increase river release to 8,500 cfs (gage height = 63.04 with a +0.18 shift).

Increase total release from the Afterbay to 8,600 cfs.