



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

February 18, 2015

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/ Stephanie Micek

Subject: **Yellowtail Water Release Order - BHR No. 15-16**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3630.04; Storage: 911,695 acre-feet; River Release: 2,830 cfs; Inflow: 3,160 cfs;

GENERAL COMMENTS:

The reservoir elevation at Yellowtail Dam continues to increase due to warm temperatures; therefore an increase in releases is needed in order to meet targeted reservoir elevations by early spring.

Also, Yellowtail Powerplant will be restricted to intermittent two unit operation during Monday, February 23 through Wednesday, February 25, 2015, for exciter bridge installation and commissioning. In response, the following operation is 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 between a maximum elevation of 3192.0 feet and a minimum elevation of 3183.6 feet and provide a mixing flow of approximately 75% through the spillway gates and 25% through the sluice gates, plus or minus 10%.

YELLOWTAIL TURBINE RELEASE:

At 1600 hour on Thursday, February 19, 2015:

Increase average daily turbine release to $\approx 2,930$ cfs ($\approx 1,910$ MW-Hours/day using 36.8 cfs/mw).

During 0800 hour through 1700 hour on Monday, February 23, 2015:

Maintain average daily turbine release at $\approx 2,930$ cfs ($\approx 1,910$ MW-Hours/day using 36.8 cfs/mw).

Limit turbine release to 2-unit capacity.

During 1700 hour on Monday, February 23, 2015 through 0700 hour on Tuesday, February 24, 2015:

Maintain average daily turbine release at $\approx 2,930$ cfs ($\approx 1,910$ MW-Hours/day using 36.8 cfs/mw).

Limit turbine release to 3-unit capacity.

During 0700 hour through 2000 hour on Tuesday, February 24, 2015:

Maintain average daily turbine release at $\approx 2,930$ cfs ($\approx 1,910$ MW-Hours/day using 36.8 cfs/mw).

Limit turbine release to 2-unit capacity.

During 2000 hour on Tuesday, February 24, 2015 through 0700 hour on Wednesday, February 25, 2015:

Maintain average daily turbine release at $\approx 2,930$ cfs ($\approx 1,910$ MW-Hours/day using 36.8 cfs/mw).

Limit turbine release to 3-unit capacity.

During 0700 hour through 1500 hour on Wednesday, February 25, 2015:

Maintain average daily turbine release at $\approx 2,930$ cfs ($\approx 1,910$ MW-Hours/day using 36.8 cfs/mw).

Limit turbine release to 2-unit capacity.

AFTERBAY RELEASE AND OPERATION:

At 1600 hour on Thursday, February 19, 2015:

Maintain diversion to the Bighorn Canal at 0.

Increase river release to 3,000 cfs (gage height = 60.26 with a +0.13 ft shift).

Increase total release from the Afterbay to 3,000 cfs.

During 0800 hour on Monday, February 23, 2015 through 1500 hour on Wednesday, February 25, 2015:

Maintain diversion to the Bighorn Canal at 0.

Maintain river release at 3,000 cfs (gage height = 60.26 with a +0.13 ft shift).

Maintain total release from the Afterbay at 3,000 cfs.