



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 16, 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. 14-55**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3623.58; Storage: 856,649 acre-feet; River Release: 4,920 cfs; Inflow: 9,180 cfs;

GENERAL COMMENTS:

This water order confirms operations conducted yesterday. On June 15, 2014, WAPA requested a temporary emergency bypass of the Yellowtail Powerplant due to overloading of system conditions. The river outlet works were used on June 15, 2014, from approximately 1100 hour to 1600 hour. The previous request from WAPA to limit total generation from Yellowtail Powerplant to 172 MW/hour was restored. The following operations were 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 1100 hour on Sunday, June 15, 2014:

Increase release through the river outlet works to 2,150 cfs.

At 1600 hour on Sunday, June 15, 2014:

Decrease release through the river outlet works to 0 cfs.

YELLOWTAIL TURBINE RELEASE:

At 1100 hour on Sunday, June 15, 2014:

Decrease average daily turbine release to 3,200 cfs (\approx 2,151 MW-Hours/day using 35.7 cfs/mw).

At 1600 hour on Sunday, June 15, 2014:

Increase average daily turbine release to 5,350 cfs (\approx 3,597 MW-Hours/day using 35.7 cfs/mw).

Restrict and limit turbine release to 3-unit capacity.

AFTERBAY RELEASE AND OPERATION:

At 1100 hour on Sunday, June 15, 2014:

Maintain diversions to the Bighorn Canal at 500 cfs (gage height = 74.00 with a -0.22 shift).

Maintain river release at 4,920 cfs (gage height = 61.48 with a +0.11 shift).

Maintain total release from the Afterbay at 5,420 cfs.

At 1600 hour on Sunday, June 15, 2014:

Maintain diversions to the Bighorn Canal at 500 cfs (gage height = 74.00 with a -0.22 shift).

Maintain river release at 4,920 cfs (gage height = 61.48 with a +0.11 shift).

Maintain total release from the Afterbay at 5,420 cfs.