



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 25, 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. 14-58**

CURRENT RESERVOIR CONDITIONS:

Elevation: 3621.48; Storage: 925,249 acre-feet; River Release: 3,000 cfs; Inflow: 7,950 cfs;

GENERAL COMMENTS:

Recent streamflow measurements conducted by the USGS indicate the need to apply a new shift to the Bighorn Canal and Bighorn River gages since actual flows are lower than anticipated. Current flows in the canal are meeting current irrigation demands therefore no change in diversions to the Bighorn Canal will be made.

To conserve storage in Bighorn Lake, a new shift will be applied to the river gage but the river release will continue to be maintained at the current stage and rate. To adjust for the new shift on the canal and river, 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 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 1500 hour on Wednesday, June 25, 2014:

Maintain average daily turbine release at 2,795 cfs (\approx 1,990 MW-Hours/day using 33.7 cfs/mw).

Restrict and limit turbine release to 3-unit capacity.

AFTERBAY RELEASE AND OPERATION:

At 1500 hour on Wednesday, June 25, 2014:

Maintain diversions to the Bighorn Canal at 325 cfs (gage height = 73.38 with a new shift of -0.72).

Maintain river release at 2,540 cfs (gage height = 60.68 with a new shift of -0.65).

Maintain total release from the Afterbay at 2,865 cfs.