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United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137



September 11, 2012

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-6400
Assistant Superintendent, National Park Service, Lovell, Wyoming
Attention: Valerie Newman

From: Reservoir and River Operations, Billings, Montana

Subject: **Yellowtail Water Release Order - BHR No. 12-54**

CURRENT RESERVOIR CONDITIONS

Elevation: 3627.76 Storage: 891,359 acre-feet; River Release: 1,750 cfs; Inflow: 1,900 cfs;

GENERAL COMMENTS:

Staff at the Yellowtail Field Office will be conducting a black start test on October 10, 2012. This will require that all four powerplant units be off line for approximately 3 hours beginning at 0800 hour. The plant will initiate opening of yard breakers YT-482, YT-1462, and YT-128 securing power to all plant station service transformers and allowing the plant Emergency Diesel generator to supply station service power via the automatic transfer switch. Unit 1 will be started and used to energize back to the switchyard. Once this is done, all units will be shut down and normal station service power will be aligned by closing in all 3 yard breakers and returning to normal split bus station service configuration before returning unit controls to Casper. Plans are to release water through the hollow-jet valves to the Afterbay to compensate for loss in turbine flows while the turbines are shut down. This should allow Reclamation to maintain a constant water level in the Afterbay during this time. In response, the following operation change is required at Yellowtail Dam, Powerplant and Afterbay Dam.

YELLOWTAIL TURBINE RELEASE:

During 0800-1100 hour on Wednesday, October 10, 2012:

Decrease average daily turbine release to 0 cfs (≈ 0 MW-Hours/day using 44.0 cfs/mw).

YELLOWTAIL BYPASS RELEASE:

During 0800-1100 hour on Wednesday, October 10, 2012:

Initiate and maintain release through the spillway gates to 1,680 cfs.

AFTERBAY RELEASE AND OPERATION:

During 0800-1100 hour on Wednesday, October 10, 2012:

Maintain diversions to the Bighorn Canal at 0 cfs (gage height = 68.35 with shift of +0.15).

Maintain river release at 1,750 cfs (gage height = 59.49 with shift of -0.15).

Maintain total release from the Afterbay at 1,750 cfs.

It is anticipated that diversions to the Bighorn Canal will be discontinued by October 10 and the total release from Yellowtail Dam will be 1,680 cfs. To provide the proper mixing flow of water released through the Afterbay spillway radial gates and Afterbay sluice gates, the level of the Afterbay must be maintained no lower than elevation 3182 at all times.

/S/ Tim H. Felchle