



# 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

September 24, 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. 14-90**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3641.58; Storage: 1,040,923 acre-feet; River Release: 3,900 cfs; Inflow: 3,570 cfs;

### **GENERAL COMMENTS:**

The BIA has requested a shutdown of the Bighorn Canal for the irrigation season. In addition, to continue evacuating storage from the exclusive flood control pool, releases will be increased.

Western Area Power Administration (WAPA) requested total generation from Yellowtail Powerplant be limited to 136 MW/hour starting at 1500 hour on Thursday, September 25, 2014. In response, the following operations are required at Yellowtail Dam and Powerplant and Yellowtail Afterbay Dam.

**SPECIAL NOTE: Once the Yellowtail Afterbay Reservoir is brought back to a normal operating elevation, 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 to provide a mixing flow of approximately 75% through the radial gates and 25% through the sluice gates, plus or minus 10% in attempt to minimize PSAT levels.**

### **YELLOWTAIL BYPASS RELEASE:**

**At 0800 hour on Thursday, September 25, 2014:**

*Maintain a release through river outlet works at 0 cfs.*

**At 1500 hour on Thursday, September 25, 2014:**

*Initiate a release through river outlet works at approximately 540 cfs.*

### **YELLOWTAIL TURBINE RELEASE:**

**At 0800 hour on Thursday, September 25, 2014:**

*Decrease average daily turbine release to 3,930 cfs ( $\approx$  3,300 MW-Hours/day using 28.6 cfs/mw).*

**At 1500 hour on Thursday, September 25, 2014:**

*Decrease average daily turbine release to 3,890 cfs ( $\approx$  3,265 MW-Hours/day using 28.6 cfs/mw).*

- **Due to major unit re-wind project, restrict and limit turbine release to 3-unit capacity.**
- **After the scheduled maintenance described in BHR No. 14-89 is completed on September 24, 2014, WAPA will increase turbine releases to refill Yellowtail Afterbay**

**AFTERBAY RELEASE AND OPERATION:**

**At 0800 hour on Thursday, September 25, 2014:**

*Decrease diversion to the Bighorn Canal to 100 cfs (gage height = 71.89 with a -1.23 shift).*

*Maintain river release at 3,900 cfs (maintain gage height at 62.21 with a -1.21 shift).*

*Decrease total release from the Afterbay to 4,000 cfs.*

**At 1500 hour on Thursday, September 25, 2014:**

*Decrease diversion to the Bighorn Canal to 0 cfs.*

*Increase river release at 4,500 cfs (increase gage height to 62.57 with a -1.21 shift).*

*Increase total release from the Afterbay to 4,500 cfs.*