



# 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

April 10, 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/ Clayton R. Jordan

Subject: **Yellowtail Water Release Order - BHR No. 15-24**

### **CURRENT RESERVOIR CONDITIONS:**

Elevation: 3623.39; Storage: 855,142 acre-feet; River Release: 2,500 cfs; Inflow: 2,365 cfs;

### **GENERAL COMMENTS:**

The BIA requested an increase in diversions to Bighorn Canal. The water supply forecast indicates river releases need to be reduced. In response, the following operations are 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 Monday, April 13, 2015:**

*Maintain average daily turbine release at 2,580 cfs ( $\approx$  1,590 MW-Hours/day using 38.9 cfs/mw).*

**At 1600 hour on Tuesday, April 14, 2015:**

*Decrease average daily turbine release to 2,430 cfs ( $\approx$  1,500 MW-Hours/day using 38.9 cfs/mw).*

**At 1600 hour on Wednesday, April 15, 2015:**

*Increase average daily turbine release to 2,480 cfs ( $\approx$  1,530 MW-Hours/day using 38.9 cfs/mw).*

**Limit turbine release to 3-unit capacity.**

**AFTERBAY RELEASE AND OPERATION:**

**At 1600 hour on Monday, April 13, 2015:**

*Increase diversion to the Bighorn Canal to 250 cfs (gage height = 72.10 with a 0.0 ft shift).*

*Decrease river release to 2,400 cfs (gage height = 59.87 with a +0.05 ft shift).*

*Maintain total release from the Afterbay at 2,650 cfs.*

**At 1600 hour on Tuesday, April 14, 2015:**

*Increase diversion to the Bighorn Canal to 300 cfs (gage height = 72.48 with a 0.0 ft shift).*

*Decrease river release to 2,200 cfs (gage height = 59.71 with a +0.05 ft shift).*

*Decrease total release from the Afterbay to 2,500 cfs.*

**At 1600 hour on Wednesday, April 15, 2015:**

*Increase diversion to the Bighorn Canal to 350 cfs (gage height = 72.83 with a 0.0 ft shift).*

*Maintain river release at 2,200 cfs (gage height = 59.71 with a +0.05 ft shift).*

*Increase total release from the Afterbay to 2,550 cfs.*