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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



March 15, 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. 12-22**

### **CURRENT RESERVOIR CONDITIONS**

Elevation: 3619.24 Storage: 823,681 acre-feet; River Release: 3,000 cfs; Inflow: 3,540 cfs;

### **GENERAL COMMENTS:**

The USGS recently measured streamflows in the Bighorn River and actual river flows were lower than anticipated as a result of the new algae growth in the river. To adjust for the variation in flows, a new shift of -0.09 will be applied to the river gage height and the following operation change scheduled at Yellowtail Dam and Powerplant.

In addition, the drawdown of the Afterbay that was scheduled in accordance with BHR No. 12-20 for March 12-14 was cancelled and now rescheduled to take place on March 20-22. To allow for installation of temporary stoplog guides for use in the refurbishment of radial gate #3 of the Afterbay Dam, the level of the Afterbay Reservoir must be maintained at or below elevation 3178.5 during 0800 hour on March 20, 2012 through 0800 hour on March 22, 2012. The Contractor prefers maintaining the Afterbay level near elevation 3175.5 during this time. After the installation of the temporary stoplog guides, the Afterbay will be allowed to increase to no higher than elevation 3186.

### **YELLOWTAIL TURBINE RELEASE:**

**At 1600 hour on Thursday, March 15, 2012:**

*Maintain average daily turbine release at 2,810 cfs ( $\approx$  1,880 MW-Hrs/day using 35.9 cfs/mw).*

**During 0800 hour on Tuesday, March 20 through 0800 hour on Thursday, March 22, 2012:**

*Maintain average daily turbine release at 2,810 cfs ( $\approx$  1,880 MW-Hrs/day using 35.9 cfs/mw).*

### **AFTERBAY RELEASE AND OPERATION:**

**At 1600 hour on Thursday, March 15, 2012:**

*Maintain diversions to the Bighorn Canal at 0 cfs (gage height = 68.50 with 0.00 shift).*

*Maintain river gage height at 60.39 and apply new shift of -0.09 (river flows  $\approx$  2,880 cfs).*

*Maintain total release from the Afterbay at 2,880 cfs.*

**During 0800 hour on Tuesday, March 20 through 0800 hour on Thursday, March 22, 2012:**

*Maintain diversions to the Bighorn Canal at 0 cfs (gage height = 68.50 with 0.00 shift).*

*Maintain river release at 2,880 cfs (gage height = 60.39 with -0.09 shift).*

*Maintain total release from the Afterbay at 2,880 cfs.*

**Special Note: During 0800 hour on March 20 through 0800 hour on March 22, 2012, maintain the level of the Afterbay Reservoir no lower than elevation 3172 and no higher than elevation 3178.5, preferably near elevation 3175.5. After the installation of the temporary stoplog guides is completed, the Afterbay will be allowed to increase and maintained no higher than elevation 3186.**

/S/ Tim H. Felchle