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FEDERAL ENERGY REGULATORY COMMISSION

December 14, 2004

Harry T. Hall, P.E.  
Regional Engineer  
Federal Energy Regulatory Commission  
101 SW Main, Suite 905  
Portland, Oregon 97204

**Subject: Ashton Hydroelectric Project, FERC No. 2381  
Ashton Dam Temporary Operation Plan**

Dear Mr. Hall:

On Monday, December 13, 2004, PacifiCorp staff was informed by field operations of the discovery of a sink hole on Ashton dam located along the embankment side of the powerhouse training wall, in the same vicinity as the repair work completed in October 2004 and reported to your office in our November 1, 2004 letter. Operators noticed the sink hole after a warming period when snow covering the area melted and exposed the embankment. The granular fill placed over the area in October still appeared frozen except for a small area that appeared to collapse at the location of the hole.

We consulted with our independent consultant, Mr. Rich Gorny of Black & Veatch, regarding this issue to discuss an appropriate course of action. It was concluded the reservoir should be drawn down in an effort to reduce seepage activity and that further investigation was needed before any corrective action is taken. A discussion was also held with Ashton operations personnel with regard to the operation of the Ashton project during winter periods with the reservoir held below the normal operating level.

FERC Portland Regional Office was contacted to inform your staff of the situation and to discuss our plan of action. As requested by your staff, the following is a summary of the immediate plan of action and considerations for increased monitoring and operation of the project at reduced reservoir elevations through the winter period.

#### Operational Changes and Considerations

Operational changes were implemented today, increasing discharges through the Ashton plant to draw the reservoir down five feet. The Idaho Department of Fish & Game, U.S. Fish



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and Wildlife Service, Idaho Department of Natural Resources, Bureau of Reclamation, and Henry's Fork Foundation have been apprised of the operational changes.

Operating Ashton reservoir below normal elevation presents a number of operational considerations that must be addressed. An ice cap forms over the reservoir during each winter and the reservoir elevation is held as constant as possible to keep this ice cap intact throughout the winter. This is important because winter recreational activities such as ice fishing and snowmobiling utilize the reservoir during this period. It is important that the generating units remain online to regulate the discharge from the project and maintain a constant reservoir elevation to avoid disruption of this ice cap.

The spillway has a bubbler system installed to enable short term operation of the spillway in freezing conditions. The bubbler system is currently being modified to operate at the lower reservoir elevation. However, the use of the spillway to pass water for extended periods during the winter can cause ice to form on the gates and surrounding structures. It is possible that accumulated ice can interfere with adjustment of spillway gate settings or reduce the spillway capacity directly.

Another consideration to be addressed involves the potential for the intake trash racks to freeze. Operating the reservoir at elevation levels that allow exposure of the trash racks to the winter air causes cooling of the trash rack bars. This cooling can cause ice to form on the bars resulting in reduced cross section and flow capacity of the intakes. The likelihood and consequences of this freezing under these conditions are not known. We are looking at ways to reduce the potential for freezing of the intake racks.

### Monitoring

Plans for increased monitoring of the sink hole include the construction of a shelter to protect the area surrounding the powerhouse wing wall and surface of the embankment. The shelter will be designed to prevent the accumulation of snow that may obscure the ground and to keep the ground surface from freezing. The area will be observed daily for any signs of sinkhole enlargement or ground subsidence. In addition to visual observations, measurements will be taken at several locations to track the ground surface elevation. A reference point will be installed on the powerhouse wing wall to facilitate accurate measurements.

Operations staff is also checking the tailrace, downstream toe, and weep holes through the RCC portion of the dam on a daily basis for any signs of turbid water and listening for seepage noise in the storage building. They have not heard the noise since completing the repair work in October.

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Mr. Brian Kirschenman from our Engineering staff is scheduled to be on site with a representative from your office on December 15, 2004. During that visit, any additional observations will be documented.

Emergency Action Plan

The Ashton project has an emergency action plan that was prepared in accordance with the requirements of the FERC, to be consistent with the Federal Guidelines for Dam Safety. The primary purpose of the plan is to provide early warning to people who may be affected by the sudden release of water caused by natural disaster, accident or failure of any components of the Ashton project. The plan also seeks to minimize the impact on property caused by such events. Plant personnel are trained to use the plan and are ready to implement it if future conditions warrant.

Enclosed are the original and two copies of this letter. If you have any questions or need further information please contact Paul Johnson at (801)220-4630.

Sincerely,

A handwritten signature in black ink, appearing to read "R.A. Landolt for".

R.A. Landolt

Managing Director, Hydro Resources

RAL:PJ:hb