



PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY
P.O. Box 1231, Wenatchee, WA 98807-1231 • 327 N. Wenatchee Ave., Wenatchee, WA 98801
(509) 663-8121 • Toll free 1-888-663-8121 • www.chelanpud.org

June 3, 2013

VIA ELECTRONIC FILING

Honorable Kimberly D. Bose, Secretary
Nathaniel J. Davis, Sr., Deputy Secretary
FEDERAL ENERGY REGULATORY COMMISSION
888 First Street, NE
Washington, DC 20426

RE: Lake Chelan Hydroelectric Project No. 637 (Project)
Report on Ramping Rate Deviation for Reach 4 Stream Habitat Channel

Dear Secretary Bose and Deputy Secretary Davis:

This letter is to provide you with Public Utility District No. 1 of Chelan County's (Chelan PUD) follow-up report on a ramping rate deviation that occurred on Thursday, May 2, 2013, on the Chelan River. This deviation was first reported by email to the Federal Energy Regulatory Commission (FERC) Portland Office (Douglas Johnson and Erich Gaedeke) and Washington Department of Ecology (Ecology) Central Regional Office (Charles McKinney and Patricia Irle) on May 3, 2013.

License Requirement

Article 405 requires Chelan PUD to implement the instream flows, ramping rates, and tailrace flows as set forth in Article 7 of the Lake Chelan Settlement Agreement and Chapter 7 of the Comprehensive Plan attached to the settlement agreement. The specific flow requirement that is the subject of this deviation report is to maintain a minimum flow of 320 cfs into the Chelan River Reach 4 from March 15-May 15 for steelhead spawning

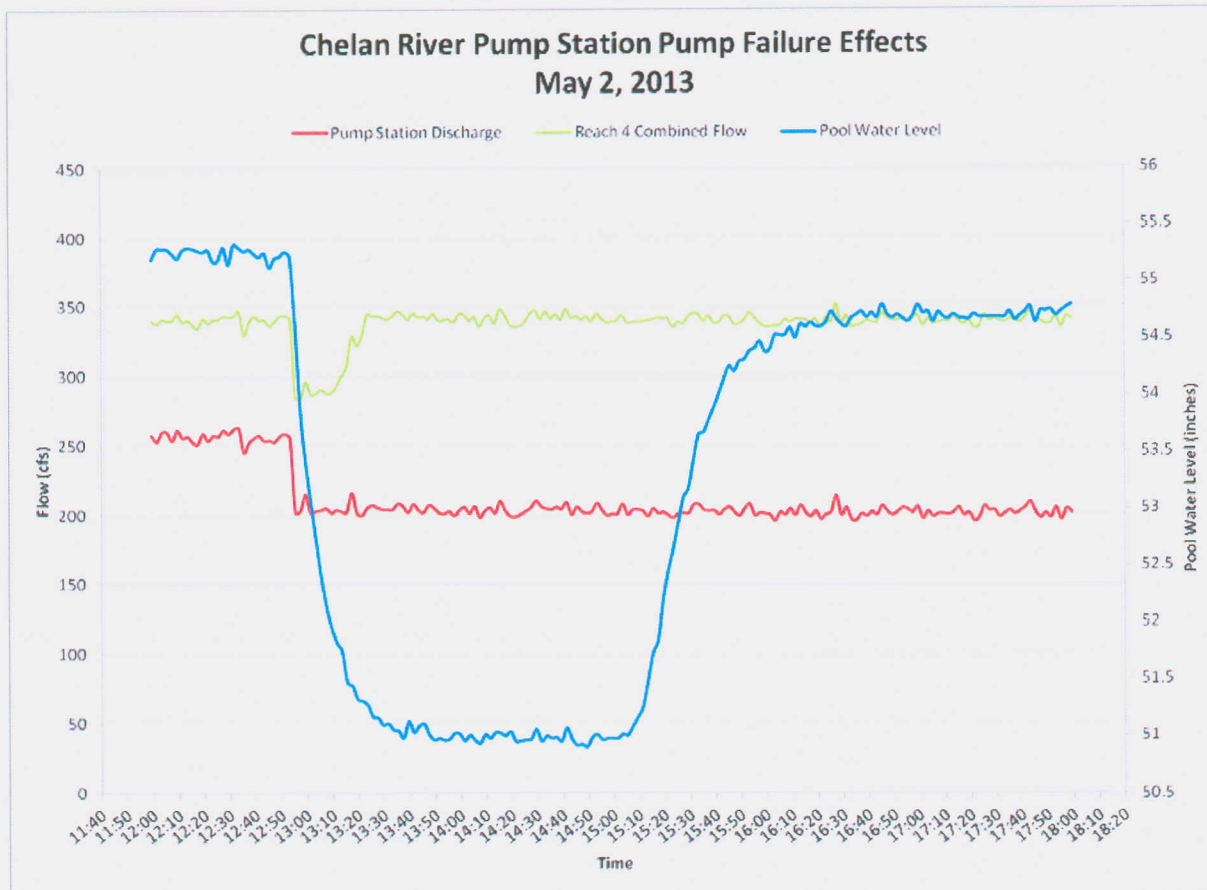
Chelan PUD issued notifications of the flow deviation in accordance with FERC's Order Modifying and Approving Operations Compliance and Monitoring Plan, Article 405, issued November 30, 2007. When a flow deviation occurs, Chelan PUD is required to notify FERC and Ecology of the deviation within 48 hours of the time that Chelan PUD became aware of the deviation. Following the initial notification, Chelan PUD is required to file a report with the Commission within 30 days of any deviation from minimum flow requirements. The report shall, to the extent possible, identify the cause, severity, and duration of the incident, any observed or reported adverse environmental impacts resulting from the incident, a description of any

proposed to ensure that similar incidents do not recur; and comments or correspondence, if any, received from the resource agencies and others regarding the incident.

Summary of Deviation and Environmental Effects

At approximately 12:53 pm on Thursday, May 2, one of the five pumps that delivers water from the Project tailrace to the Habitat Channel tripped off-line, reducing flows from the required 320 cfs to about 270 cfs. To bring flows back to 320 cfs, water was immediately released from the low level outlet at the Project dam. Coincidentally, Chelan PUD, Washington Department of Fish and Wildlife, and Ecology biologists were in the habitat channel conducting depth and velocity transect studies at the time of the event. They observed what appeared to be a 4-inch to 5-inch drop in surface water elevation in the habitat channel after the pump failed. There were no staff gauges or other indicators to determine a precise calculation of the water level change in the habitat channel. Water level monitoring in the pool at the pump station, which is continuously monitored, showed a drop in water level of 4.25 inches (see figure below). Ramping rates are set at approximately two inches per hour during the period when fry may be present. The drop was sustained for about three hours until water from the low level outlet reached the habitat channel. Water levels reached the previous points in the habitat channel by 4:30 pm. Though numerous Chinook fry were rearing in the habitat channel, none were observed stranded due to the drop in water elevation.

The pump alarm indicated that water had likely leaked past the seal into the pump. Since the schedule for pumped water to the habitat channel was due to end on May 15, the required flow was maintained between May 2 and May 15 by providing that flow from the low level outlet. After May 15, the required flow of 200 cfs for all sections of the Chelan River must be provided from the low level outlet; therefore, all pump station flow ended on May 15. The pump will be repaired during its regularly scheduled maintenance period in the summer. Pump station operation is not scheduled to resume until October 15, 2013.



Please contact me or Steven Hays at (509) 661-4181 should you have any questions regarding this incident.

Thank you,

Michelle Smith
Licensing & Compliance Manager
michelle.smith@chelanpud.org
(509)661-4180

Attachment: Email from Chelan PUD to FERC and Ecology, May 3, 2013

cc: FERC, Erick Gaedeke and Doug Johnson
Washington Department of Ecology, Pat Irle and Charlie McKinney
Chelan River Fishery Forum

Sokolowski, Rosana

From: Smith, Michelle
Sent: Friday, May 03, 2013 11:08 AM
To: 'douglas.johnson@ferc.gov'; 'erich.gaedeke@ferc.gov'; 'pirl461@ecy.wa.gov'; 'cmck461@ECY.WA.GOV'
Cc: Truscott, Keith; Osborn, Jeff; Hays, Steve; Odell, Brian; Hudson, Kirk; Garrison, Dan; Sokolowski, Rosana
Subject: Lake Chelan Project No. 637: Ramping Rate Deviation Notification for the Reach 4 Stream Habitat Channel

This email is to provide you notification regarding a ramping rate deviation, which occurred yesterday in the Habitat Channel of the Chelan River near Chelan Falls.

At approximately 12:53 pm on Thursday, May 2, one of the five pumps that delivers water from the Project tailrace to the Habitat Channel tripped off-line reducing flows from the required 320 cfs to about 270 cfs. To bring flows back to 320 cfs, water was immediately released from the Low Level Outlet at the Dam. Coincidentally, Chelan PUD, WDFW, and Ecology biologists were in the Habitat Channel conducting depth and velocity transect studies at the time of the event. They observed what appeared to be a 4" to 5" drop in surface water elevation in the Habitat Channel after the pump failed. There were no staff gauges or other indicators to determine a precise calculation of the water level change in the habitat channel. Water level monitoring in the pool at the pump station, which is continuously monitored, showed a drop in water level of 4.25 inches (see figure below). Ramping rates are set at approximately two inches per hour during the period when fry may be present. The drop was sustained for about 3 hours until water from the Low Level Outlet reached the Channel. Water levels reached the previous points in the Habitat Channel by 4:30 p.m.

Though numerous Chinook fry are currently rearing in the Habitat Channel, none were observed stranded due to the drop in water elevation.

Until the cause of the pump failure is known and repairs are made, flows of 320 cfs are being provided through combination of pumps and the Low Level Outlet. A detailed report will be filed within 30 days.

Thank you,
Michelle

*Michelle Smith
License & Environmental Compliance Manager
Chelan County PUD
(509)661-4180*

Chelan River Pump Station Pump Failure Effects May 2, 2013

