

UNITED STATES OF AMERICA 133 FERC ¶ 62,115
FEDERAL ENERGY REGULATORY COMMISSION

Public Utility District No. 1 of Chelan County,
Washington

Project No. 2145-104

ORDER MODIFYING AND APPROVING QUALITY ASSURANCE PROJECT PLAN
PURSUANT TO ARTICLE 401 AND APPENDIX A

(Issued November 03, 2010)

1. On February 19, 2010, the Public Utility District No. 1 of Chelan County, Washington (Chelan PUD or licensee) filed its Quality Assurance Project Plan, pursuant to Article 401 and Appendix A of the Rocky Reach Hydroelectric Project (project) license (FERC No. 2145).¹ The project is located on the Columbia River in Chelan County, Washington. The project occupies approximately 164 acres of federal lands.

BACKGROUND

2. Article 401 and sections 5.7(1) and 5.7(2) of Appendix A, the Water Quality Certification (WQC), of the project license require the Chelan PUD to file an annual Quality Assurance Project Plan (QAPP or plan) for Commission approval. The purpose of the plan is to determine whether the project is in compliance with its water quality standards defined in its WQC. The plan must be prepared for all water quality monitoring and include, at a minimum, a list of all water quality parameters to be measured, a map of sampling locations, and description of the following:

- the purpose of monitoring;
- sampling procedures, frequency and equipment;
- analytical methods and quality control procedures;
- data handling and assessment procedures; and
- monitoring protocols.

¹ Order on Offer of Settlement and Issuing New License (issued February 19, 2009). 126 FERC ¶ 61,138.

Chelan PUD is required to review the quality of its monitoring data and update its QAPP annually. The initial QAPP must be filed within one year of license issuance, or February 19, 2010, and must include documentation of consultation with the Washington Department of Ecology (Ecology), the WQC-issuing agent. On February 19, 2010, the Chelan PUD filed its proposed plan for Commission approval.

LICENSEE’S PROPOSED PLAN

3. The licensee’s plan proposes specific water quality monitoring, data quality control and analysis, and reporting protocols that it would implement to determine whether its operations are complying with the project’s water quality standards. The descriptions of the proposed monitoring, analysis and reporting are below.

Water Quality Monitoring

4. In its plan, the licensee proposes that water quality monitoring activities will take place in various locations at the project including the forebay, tailrace, fishway and reservoir, as well as the Rock Island forebay. Each water quality parameter and the proposed monitoring frequency is described below:

Parameter (metric)	Location(s)	Frequency
Temperature (degrees Celsius)	Rocky Reach forebay and tailrace, Rock Island forebay	Hourly, April-October
Temperature (degrees Celsius)	Juvenile fish bypass, adult fishway	Hourly for one year
Total dissolved gas (TDG) (% saturation)	Rocky Reach forebay and tailrace, Rock Island forebay	Hourly, April-August

5. The licensee’s plan describes the specific locations where monitoring would occur and includes detailed maps. The licensee’s plan also proposes specific monitoring methodologies, lists monitoring equipment that would be used, as well as the frequency at which the equipment would be calibrated.

6. In addition to the aforementioned monitoring activities, the licensee also proposes to study the water quality associated with shallow-water macrophyte beds in the project

reservoir and gas bubble trauma to aquatic biota. The licensee stated that it is currently developing these studies in consultation with Ecology and will incorporate these studies into future QAPP reports.

Data Quality Control and Analysis

7. In its plan, the licensee identifies two quality control strategies that it would implement to ensure that its monitoring data is of a known and acceptable quality for determining its compliance with the project's water quality standards. Through implementation of the first quality control strategy, the licensee would ensure that each data set is representative, complete, and comparable. The licensee's implementation of the second quality control strategy seeks to ensure that its data collection methods and monitoring equipment are precise, accurate, and sensitive to changes in conditions. The licensee's plan also defines the terms and rationale behind proposing these strategies for quality control.

8. Further, the licensee proposes to manage its monitoring data using spreadsheets. The licensee states that it would review all monitoring data for outliers and values not conforming to its quality control criteria. Once acceptable and non-acceptable data have been identified, the licensee would extract the non-acceptable data to a separate spreadsheet, and conduct its analysis on the acceptable data. The licensee proposes to conduct a combination of statistical analyses and complex modeling on the acceptable data set to determine the frequency of its compliance or non-compliance with the project's water quality standards.

Reporting

9. Chelan PUD proposes to develop an annual QAPP report and file it with Ecology by March 1st of each year. In its report, the licensee would include:

- the results of all sampling and measurement procedures;
- conclusions regarding its compliance with the project's water quality standards; and
- recommendations for further action, if necessary.

10. In addition to the report content described above, the licensee proposes to include its annual Gas Abatement Report (GAR) with the annual QAPP report. The licensee states in its proposed plan, that although this report falls under a separate requirement of the WQC than the QAPP, the data from the GAR is important in determining Chelan PUD's compliance with the project's water quality standard for TDG. The licensee

stated that it would still adhere to the December 31st annual filing deadline assigned by Ecology for the GAR, but would also include the report in its annual filing of the QAPP. When filing the QAPP, the licensee proposes to modify the GAR to include the following information:

- forebay flow during preceding year;
- spill activities and reasons for the spill(s);
- TDG concentrations during the spill(s);
- TDG exceedances and any associated corrective measures;
- results of fish passage efficiency and survival studies; and
- an analysis of the effectiveness of regression equations used to predict compliance with TDG standards.

11. Finally, the licensee's plan includes a provision to self-report any exceedance of project water quality standards to Ecology within a 48-hour time frame.

AGENCY CONSULTATION

12. Chelan PUD provided its plan to Ecology for review and comment on December 21, 2009. By letter dated January 1, 2010, Ecology provided several comments regarding TDG and water temperature. Specifically, Ecology requested that the licensee clarify several statements regarding how the monitoring data would be analyzed to determine compliance with the water quality standards. Additionally, Ecology requested that the licensee identify the locations of its proposed sampling stations. The licensee addressed all of Ecology's comments and incorporated them into its plan, which Ecology then approved.² On February 19, 2010, the licensee filed its plan with the Commission for approval.

DISCUSSION AND CONCLUSION

13. The licensee's plan adequately describes the framework in which the licensee will conduct water quality monitoring at the project and analyze the monitoring data to determine its compliance with project water quality standards. The plan, as proposed,

² Chelan PUD provided Commission staff documentation of Ecology's approval of the plan via electronic correspondence dated October 22, 2010.

contains all of the elements required by article 401 and Appendix A of the project license, and represents a collaborative effort between the licensee and Ecology.

14. Although monitoring activities associated with the project's shallow-water macrophyte beds and gas bubble trauma will not take place under this iteration of the licensee's proposed QAPP as originally intended in the WQC, the licensee has demonstrated its intent to conduct the monitoring once it has finalized its study plans. The licensee has consulted with Ecology regarding the development timeline for the study plans and upon receiving Ecology's approval of the study plans, will include them in a subsequent QAPP.

15. While the licensee's plan identifies a deadline for filing its annual report with Ecology, it does not propose a deadline for filing the annual report with the Commission. Upon filing its annual report with Ecology on March 1st, the licensee should provide Ecology a minimum of 30 days to comment on the report, and should then file the annual report with the Commission by May 1st. The licensee should include documentation of consultation with Ecology and its response to any of Ecology's comments in its filing with the Commission.

16. Chelan PUD's plan meets the requirements of article 401 and Appendix A of the project license and, as modified, should be approved.

The Director orders:

(A) Public Utility District No. 1 of Chelan County, Washington's (Chelan PUD) proposed Quality Assurance Project Plan, filed on February 19, 2010, pursuant to article 401 and Appendix A of the project license for the Rocky Reach Hydroelectric Project, FERC No. 2145, as modified in paragraph (B) below, is approved.

(B) Chelan PUD shall file its annual quality assurance project report with the Commission by May 1st of each year for the duration of the license. Chelan PUD shall include documentation of consultation with the Washington Department of Ecology and its response to any comments in its filing with the Commission.

(C) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the FPA, 16 U.S.C. § 8251 (2006), and the Commission's regulations at 18 C.F.R. § 385.713 (2010). The filing of a request for rehearing does not operate as a stay of the effective date of this order, or of any other date specified in this order. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

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and Compliance