

148 FERC ¶ 62,177
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Public Utility District No. 1 of Chelan County

Project No. 637-037

ORDER APPROVING CHELAN RIVER WATER TEMPERATURE MODELING
STUDY QUALITY ASSURANCE PROJECT PLAN

(Issued September 4, 2014)

1. On April 11, 2014, Public Utility District No. 1 of Chelan County (licensee), filed its Chelan River Water Temperature Modeling Study Quality Assurance Project Plan with the Federal Energy Regulatory Commission (Commission) for approval. The licensee filed its plan pursuant to the Commission's November 30, 2007 Order Modifying and Approving Quality Assurance Project Plan under license Article 401 and Water Quality Certification Condition V.B.(November 2007 order).¹ The project is located on the Chelan River in Chelan County, Washington. The project occupies federal lands administered by the U.S. Forest Service and U.S. Department of the Interior, National Park Service.

LICENSE REQUIREMENT AND BACKGROUND

2. License Article 401 of the project license requires various plans to be filed for Commission approval.² Condition V.B of the Washington Department of Ecology's (Ecology) 401 Water Quality Certification (WQC) for the project requires the licensee, within one year of the date of license issuance, prepare a Quality Assurance Project Plan (QAPP) for water quality monitoring and temperature modeling, and submit the plan to Ecology for review and approval. On May 4, 2007, the licensee filed its plan with the Commission for approval. As a part of the licensee's plan, it proposed to file a separate QAPP for its temperature modeling study due to the complexity of the water temperature modeling. The plan was approved by the Commission's 2007 order, and ordering

¹ See 121 FERC ¶ 62,154.

² Order On Offer Of Settlement And Issuing New License. 117 FERC ¶ 62,129 (issued November 6, 2006).

paragraph (B) and (C) of that order requires the licensee to file a temperature modeling QAPP with the Commission for approval by September 1, 2010 and a revised QAPP by April 30, 2012.³

3. On August 9, 2010, the licensee filed a request with the Commission to revise its schedule for filing the temperature modeling QAPP and the revised QAPP to allow time to collect water temperature data for use in the model prior to and after the implementation of minimum flow and habitat improvements required by the new license order. By order dated September 2, 2010, the Commission revised the Quality Assurance Project Plan filing schedule.⁴ The order states, in part, that water temperature modeling requires three to five years of temperature modeling in the lower portion of Lake Chelan; as well as the same number of years once the Chelan River flows are established. Accordingly, the license schedule for water temperature modeling was revised to correspond with the first year of completed Chelan River habitat improvements and the initiation of minimum flows. The order extended the deadline for submission of the temperature modeling QAPP until September 1, 2013 and April 30, 2015 for the revised QAPP.

4. On August 29, 2013, the licensee filed a request for an extension of time to file its QAPP for the water temperature modeling study. The Commission granted that request in its October 15, 2013 Order Granting Extension of Time, establishing a new due date of April 15, 2014.⁵

LICENSEE'S PLAN

5. The project license requires the licensee to monitor and evaluate water temperatures at the project to identify measures to implement to achieve biological

³ Stemming from the original license requirement, the licensee is required to file an original QAPP for Commission approval and after implementation and assessment of study results, the licensee is required to file a revised QAPP after year 6 of the license implementation to address necessary changes in the QAPP with regard to achieving biological objectives for cutthroat trout.

⁴ See 132 FERC ¶ 62,147. Order Revising Quality Assurance Project Plan Filing Schedule Under Article 401 And Water Quality Certification Condition V.B.

⁵ Note that the filing date for the revised QAPP remains April 30, 2015 as required by the Commission's September 2, 2010 order.

objectives for cutthroat trout above the falls, and for Chinook salmon and steelhead below the falls in the Chelan River. Part of the evaluation is the development of a water temperature model to evaluate naturally occurring and project related influences on water temperature. The licensee's April 11, 2014 filing, proposes a defined scope, data sources, data quality, and reliability of the proposed temperature model to achieve the biological objectives.

6. The licensee's plan states that it collects data on flow through the project facilities, inflow and outflow for the entire project, lake elevation, temperature at eight locations along the Chelan River, and vertical temperature profiles in the project forebay. The plan states that this data would be used to provide data for the temperature model. In addition, the license also proposes to use meteorological data from the AgWeatherNet "Chelan South" station for use in the temperature model.⁶

7. The licensee's plan provides analysis of existing temperature data and how naturally occurring variables such as flow, meteorological conditions, and project operations effect temperature in the Chelan River. The licensee states that the goal of the temperature model is to evaluate various means to decrease warm summer water temperatures and provide a tool in determining what designated aquatic life uses are attainable.

8. The licensee proposes to use HEC-RAS to model hydraulic conditions in the river and QUAL2Kw to model temperature. The licensee proposes to use LiDAR elevation data collected in 2009 for the channel geometry used in the HEC-RAS model and to supplement that data with cross sections developed at 200-300 foot intervals. The licensee also proposes to model calibration and validation methods and to run simulation alternatives to evaluate the potential benefits of channel modification, canopy cover, and increased flow to achieve the biological objectives. Further, the licensee proposes quality control procedures for monitoring data and the overall model study as well as data review, quality assessment, and validation for the various data applied in the model study.

9. Finally, the licensee proposes to file a final report for the study with Ecology by June 30, 2015.

⁶ The AgWeatherNet meteorological station would provide data on air temperature, relative humidity, dew point temperature, wind speed and direction, and solar radiation.

AGENCY CONSULTATION

10. On January 15, 2014, the licensee submitted its plan to Ecology for review and comment and on February 21, 2014, Ecology responded with numerous comments regarding the draft plan. Comments consisted of clarification of study methods and data sources, clarification of tables and figures, and clarification of the model's interpretation. The licensee addressed all of Ecology's comments and changed or provided an explanation for its response.

CONCLUSIONS

11. The licensee's temperature model development, water temperature monitoring, data management and quality assurance and control measures proposed in its temperature modeling QAPP should provide the quantity and quality of data necessary to execute its temperature model. The temperature model should assist in evaluating influences, both naturally occurring and project related, on water temperature. The model should also assist in simulating various changes in river morphology, canopy cover, flow change, depth, and other physical attributes, thus providing a tool for evaluating changes and evaluating the attainability of designated aquatic life uses for the Chelan River.

12. The licensee proposes to file a draft report for its temperature modeling study with Ecology by February 28, 2015, and a final report by June 1, 2015; however, the licensee does not propose to file the report with the Commission. Therefore, in order to keep the Commission informed of the results of its temperature modeling study, the licensee should file a copy of the final agency reviewed report with the Commission for review by August 1, 2015. The report filed with the Commission should include any recommendations and comments received from Ecology and the licensee's responses to those recommendations and comments.

13. The licensee's April 11, 2014 filing satisfies the requirement of ordering paragraph (B) of the Commission's November 30, 2007 Order Modifying and Approving Quality Assurance Project Plan under license Article 401 and Water Quality Certification Condition V.B., to file a temperature modeling QAPP with the Commission for approval and as modified, should be approved.

The Director orders:

(A) Public Utility District No. 1 of Chelan County's (licensee) Chelan River Water Temperature Modeling Study Quality Assurance Project Plan, filed April 11, 2014, pursuant to ordering paragraph (B) of the Federal Energy Regulatory Commission's (Commission) November 30, 2007 Order Modifying and Approving Quality Assurance Project Plan under license Article 401 and Water Quality Certification Condition V.B. for the Lake Chelan Project, as modified in paragraph (B) below, is approved.

(B) In order to keep the Commission informed of the results of its temperature modeling study, the licensee must file a copy of its final Washington Department of Ecology (Ecology) reviewed report with the Commission for review by August 1, 2015. The report filed with the Commission must include any recommendations and comments received from Ecology and the licensee's responses to those recommendations and comments. If the licensee does not adopt a recommendation, the report must include the licensee's reasons based on project specific information.

(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 Federal Power Act, 16 U.S.C. § 825l (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2014). 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 constitutes acceptance of this order.

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