

153 FERC ¶ 62,007
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Public Utility District No. 1 of Chelan County

Project No. 637-035

ORDER APPROVING 2015 FINAL BIOLOGICAL OBJECTIVES
STATUS REPORT UNDER ARTICLES 401 AND 408

(Issued October 5, 2015)

1. On April 29, 2015, Public Utility District No. 1 of Chelan County (licensee), filed with the Federal Energy Regulatory Commission (Commission), its 2015 Final Biological Objectives Status Report (2015 Final Status Report) for the Lake Chelan Hydroelectric Project (FERC No. 637). The report was filed pursuant to Articles 401 and 408 of the project license.¹ The project is located on the Chelan River, near the City of Chelan, in Chelan County, Washington. The project occupies federal lands administered by the U.S. Forest Service (FS) and the U.S. Department of the Interior, National Park Service (Park Service).²

LICENSE REQUIREMENTS AND BACKGROUND

2. License Article 408 requires the license to file, for Commission approval, a Threatened and Endangered Species Protection Plan. The plan is to include a series of elements specified in the article to satisfy requirements of the Lake Chelan Settlement Agreement (Settlement Agreement), which is attached to the license as Appendix A, and incidental take terms and conditions stipulated by the National Marine Fisheries Service (NMFS), which are attached to the license as Appendix E. The Commission approved the licensee's plan by order issued November 28, 2007.³

3. Pursuant to the approved plan, as well as Article 7(c)(2) of the Settlement Agreement, and Condition IV.E of the Washington State Department of Ecology (Ecology) Water Quality Certification (WQC) which is attached to the license as Appendix D, the licensee is to provide final biological objectives status reports to the

¹ Order on Offer of Settlement and Issuing New License. 117 FERC ¶ 62,129 (issued November 6, 2006).

² The federal lands are in the Wenatchee National Forest and the Lake Chelan National Recreation Area of the North Cascades National Park.

³ Order Approving Threatened and Endangered Species Plan Under Article 408. 121 FERC ¶ 62,143.

Chelan River Fisheries Forum (CRFF)⁴ by April 30 of the years 2010, 2012, 2014, and 2016. The reports are to summarize the results of the monitoring and evaluation program contained in the Settlement Agreement, evaluate the need for modifications, describe the degree to which biological objectives have been achieved and prospects for achieving them, review measures implemented to meet those biological objectives, and recommend any new or modified measures needed to achieve the objectives, to the extent practicable.

4. License Article 401 requires the licensee to file, for Commission approval, certain plans and reports required by the Settlement Agreement and the WQC, including the Final Biological Objectives Status Reports. On March 11, 2010, the licensee requested a revision to the schedule for filing the final status reports, which was approved in an order issued May 19, 2010.⁵ Under the revised schedule, the final status reports are to be filed by April 30 of 2013, 2015, 2017, and 2019.

LICENSEE'S 2015 FINAL BIOLOGICAL OBJECTIVES STATUS REPORT

5. The licensee's 2015 Final Status Report describes the results of monitoring and evaluation programs that have been implemented since the placement of spawning gravel in the tailrace in 2008, completion of spawning and rearing habitat in Reach 4 of the Chelan River, and implementation of minimum flows established under the 2006 relicensing of the project, which began in October of 2009.⁶ The licensee's report consists of three sections that review the licensee's progress in implementing and achieving the biological objectives described in the Settlement Agreement. The licensee's report covers progress in achieving biological objectives for Chinook salmon and steelhead, which includes spawning survey counts, redd distribution, intragravel dissolved oxygen (DO) levels, egg to fry emergence survival rates, and presence of rearing juveniles. The report also describes progress in achieving the biological objective for cutthroat trout, which requires the observation of 200 fish of various life stages.

⁴ Members of the CRFF include the NMFS, FS, Park Service, U.S. Fish and Wildlife Service (FWS), Ecology, Washington State Department of Fish and Wildlife, Confederated Tribes of the Colville Reservation, Yakima Indian Nation, Confederated Tribes of the Umatilla Indian Reservation, City of Chelan, and Lake Chelan Sportsman Association.

⁵ Order Revising Threatened and Endangered Species Protection Plan Schedule Under Article 408. 131 FERC ¶ 62,151.

⁶ The four river sections referenced in the report, designated Reaches 1, 2, 3, and 4, span the length of the 3.9-mile-long bypassed reach of the Chelan River. The report also addresses work in a 0.5-mile habitat channel within Reach 4, and in the 1,700-foot-long tailrace.

Chinook salmon

6. The licensee's report describes the results of its monitoring and evaluation in reaching the biological objectives set forth in the Chelan River Biological Evaluation and Implementation Plan (Plan).⁷ The licensee reports that the spawning habitat in Reach 4 and the habitat channel, meets the design criteria. Improvements in spawning habitat in Reach 4, has resulted in an increase in spawning activity as indicated by the significant increase in spawning redds. Habitat channel flows during the Chinook and steelhead spawning period are provided by a combination of spill and supplemental flow from 5 pumps as described in the Plan. The Plan targeted optimal flow as a minimum of 320 cubic feet per second (cfs) in the habitat channel. Actual implementation of this flow regime has resulted in flows in the 340 to 350 cfs range. The licensee reports that Ecology, Washington Department of Fish and Wildlife and its staff have determined that the resulting velocity may be too high based on Habitat Suitability Index measurements during early rearing of Chinook salmon fry. The licensee notified the Commission of its consultation with the CRFF and intention to reduced flow in the channel by operating 4 pumps rather than 5 with a resulting flow of 280 to 320 cfs.⁸ One spawning season evaluated during the 4 pump operation during 2013 has resulted in an increase in spawning redds in Reach 4. Continued data collection in 2014 and 2015 was not available for this report, however, the licensee will continue to evaluate if the 4 pump operation creates better spawning and rearing habitat and will include the results of its findings in its next report. In all, the licensee reports that it has met the biological achievement objective for this task.

7. Regarding Chinook salmon spawning, the licensee also reports that it has met the intragravel DO objective of ≥ 6 milligrams per liter (mg/l) and the project is being operated to maintain the achievement of this objective. The licensee's studies have determined that the ≥ 6 mg/l DO can be maintained by the operation of one turbine at minimum generation. Additional studies of DO in this reach are ongoing during 2015.

8. The licensee reports that it has evaluated egg and pre-emergent Chinook fry for two incubation periods during 2013 to 2014 and 2014 to 2015. Survival rates of 87 percent were documented and the licensee reports that it has observed similar rates thus far in 2014 to 2015, which is still under evaluation. As such, the licensee reports that the objective of providing conditions suitable to meet a 70 percent survival from egg to emergence in the tailrace and habitat channel has been met. In addition, the licensee states that its studies have determined that the objective to provide early rearing habitat has been met. It also determined that adult Chinook production resulting from spawning

⁷ Chelan River Settlement Agreement October 8, 2003).

⁸ See licensee's letters dated October 15, 2013 and March 13, 2015 in the Commission's eLibrary system.

and rearing improvements in the tailrace and habitat channel have also most likely been achieved.⁹

Steelhead

9. Steelhead spawning use of the habitat channel has decreased since studies began in 2011. In an effort to provide additional spawning substrate, the licensee added 70 cubic yards of small gravel to the habitat channel in areas where previous redds were observed, however, some use of the habitat has been observed in most years. The licensee refers to the reduction of flow as discussed in paragraph 6 of this order as a possibility for improving spawning use and subsequent rearing of steelhead. The licensee reports that further study of steelhead spawning run returns will assist in evaluation of steelhead usage and success under the provided habitat regime. The licensee also reports that the CRFF has not yet made recommendations regarding whether the habitat channel as currently operated is providing a balance between spawning and rearing habitat for steelhead and Chinook. The licensee reports that the objective to meet intragravel DO concentrations of ≥ 6 mg/l for steelhead in the tailrace and habitat channel has been met by means of providing the required flow and substrate. Future study of returning runs and successful development of redds would allow for further study of this objective.

10. Regarding the objective to evaluate egg to emergence survival, the licensee reports that this objective has not been met. The licensee states that due to the steelhead listing under the Endangered Species Act (ESA), actions to disturb redds in order to evaluate egg to emergence survival would be regarded as “take” under the ESA. The licensee further cites the success of this objective for Chinook in the reach as support for similar success for steelhead. The licensee refers to the CRFF for a suitable method to evaluate this objective or to determine that the objective has been likely to have been achieved. Regarding the use of available rearing habitat by juvenile steelhead, the licensee reports that surveys during 2012 resulted in no observation of juveniles in the habitat channel, most likely related to high flows during the June 2012 survey. However, the 2013 survey resulted in observations of juvenile steelhead in the habitat channel and the pool above it. During the 2014 survey, no fry were observed in coincidence with the observation of no redds during the survey that year. The licensee indicates that further study of rearing success are needed to determine if the habitat channel is providing suitable rearing habitat for juvenile steelhead. Further, the licensee states that adult production of steelhead in the Chelan River has not been evaluated due to the lack of a suitable method and refers to the CRFF for consultation for evaluating this objective.

⁹ The licensee notes that two years of returning adult production have been evaluated thus far, and that continuing studies will further evaluate this objective as seasonal runs return to spawn.

Cutthroat Trout

11. The biological objective for cutthroat trout is observing 200 fish of various age classes after the initiation of restorative flows to Reaches 1 through 3. The license reports that snorkel surveys have determined that cutthroat trout are slowly colonizing the reaches from populations in Lake Chelan. A survey in 2014 observed cutthroat from 7 to 15 inches. No young of year or juvenile cutthroats have been observed in Reaches 1 through 3. The licensee reports that the CRFF agreed that fry and fingerlings should be stocked in the reaches and in October of 2014, 2000 were released, however, none were observed in the November survey, which the licensee asserts may be due to colder water temperatures resulting in these fish staying in the substrate where observation was unlikely. The licensee's experience in conducting these snorkel surveys has determined that conducting snorkel surveys in Reaches 2 and 3 are a safety concern and proposes to use Reach 1 for further evaluations. Another objective for cutthroats is to create habitat to support viable populations of cutthroat in Reaches 1 through 3. The licensee states that the primary measure for creating this habitat in the settlement was to manage high summer water temperatures. The licensee reports that its temperature monitoring for the last five years has not indicated that water temperature or other limiting factors are preventing the establishment of viable populations in these reaches. The licensee would continue to monitor for cutthroat population viability through the observation of various age classes and the success of the 2000 juveniles that were released into the reaches in 2014.

CONSULTATION

12. The licensee provided a draft of the 2015 status report to the members of the CRFF on March 16, 2015. The licensee received comments from Ecology via email during the 30 day review period. On April 23, 2015, the licensee summarized and addressed Ecology's comments and incorporated them into the 2015 final status report as supplied to CRFF members and filed with the Commission. No other comments were received.

DISCUSSION

13. The licensee's 2015 Final Biological Objectives Status Report, filed April 29, 2015, fulfills the relevant 2015 filing requirements of license Article 401 as established in Article 7(c)(2) of the Settlement Agreement, and Condition IV.E of Ecology's WQC, and the Commissions May 19, 2010 Order Revising Threatened and Endangered Species Protection Plan Schedule Under Article 408. The report includes the information required by the Settlement Agreement and the project WQC, and incorporates the comments provided by members of the CRFF. Therefore, the licensee's report should be approved.

The Director orders:

(A) Public Utility District No. 1 of Chelan County's (licensee) 2015 Final Biological Objectives Status Report, filed with the Federal Energy Regulatory Commission (Commission) on April 29, 2015, fulfills the relevant 2015 filing requirements of Article 401 of the project license and the Commission's Order Revising Threatened and Endangered Species Protection Plan Schedule Under Article 408 for the Lake Chelan Hydroelectric Project, and is approved.

(B) 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. § 8251 (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2015). 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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Document Content(s)

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