

UNITED STATES OF AMERICA 116 FERC ¶62,010
FEDERAL ENERGY REGULATORY COMMISSION

Tacoma Power

Project No. 2016 - 099

ORDER APPROVING HATCHERY COMPLEX REMODEL
AND PHASE-IN PLAN, ARTICLE 7

(Issued July 05, 2006)

On January 18, 2005, Tacoma Power (licensee) filed its Hatchery Complex Remodel and Phase-In Plan (Plan) pursuant to Settlement Agreement Article 7 of the March 13, 2002 Order Approving Settlement and Issuing New License¹ and the July 9, 2004 Order Amending New License² for the Cowlitz River Project. By letter issued September 26, 2003, the Commission established the effective and issuance date of the new license for compliance purposes as July 18, 2003, the date of the Order Denying Rehearing and Lifting Stay.³ The plan was supplemented by letter filed with the Commission on June 12, 2006. The project consists of the Mayfield and Mossyrock developments and is located on the Cowlitz River in Lewis County, in southwestern Washington.

BACKGROUND AND LICENSE REQUIREMENTS

Article 7 requires the licensee, in consultation with the Fisheries Technical Committee (FTC),⁴ to develop and file for Commission approval a plan for the Hatchery Complex remodel. The plan is required to include: a) hatchery design drawings that include decreased rearing densities and innovative practices to replicate historic

¹ 98 FERC ¶ 61,274 (2002)

² 108 FERC ¶ 61,031 (2004)

³ 104 FERC ¶ 61,092 (2003)

⁴ The FTC is comprised of the licensee and representatives from the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, Yakama Nation, and American Rivers/Trout Unlimited.

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outmigration size and timing; b) plans for construction scheduling; c) a provision for hatchery water supply that maximizes water from existing groundwater wells and, if necessary, provides for treatment of up to 10 cubic feet per second of additional river water; and d) a plan for gradual transition to innovative rearing practices. It should be noted that the licensee's Fisheries and Hatchery Management Plan under Article 6 required Commission approval prior to approval of the subject plan. The Commission's Order Modifying and Approving Fisheries and Hatchery Management was issued on April 6, 2006. By letter filed with the Commission on June 12, 2006, the licensee provided a revised implementation schedule and identified some of the changes to the design and planned work for the subject plan as a result of the Commission's April 6, 2006 order.

LICENSEE'S PLAN

The conceptual drawings included in the licensee's plan would accommodate a mix of species at site-specific densities developed at the Cowlitz Hatchery Complex to a total of 650,000 pounds of annual production. The new juvenile pond design at the Salmon Hatchery would provide additional juvenile rearing space thus improving rearing conditions by reducing the exposure to diseases and converting from a circular flow pattern to a flow-through design. The additional innovative practices proposed in the licensee's plan include replicated tests of juvenile salmonids grown in raceways that are partially shaded, volitional release from ponds, non-traditional feeding methods and growth programming, incubation improvements, and target release sizes that replicate historic outmigrant sizes and timing.

During construction, fish would be reared at the Cowlitz Salmon and Trout Hatcheries with the intent to maintain current fish production levels. The licensee's plan identifies the following five major construction phases for the Cowlitz Salmon Hatchery which is interdependent with timing of hatchery operations: 1) construction of the new adult holding and handling facilities; 2) modifications to the adult separation facility; 3) modifications to the main hatchery building, including new provisions for incubation and early rearing; 4) demolition and rebuild of the north juvenile rearing ponds; and 5) demolition and rebuild of the south juvenile rearing ponds.

The licensee plans to maximize available well water in addition to providing additional treated water by implementing the following measures: 1) improve control of existing well water supply systems to minimize overflow to drains by installing variable frequency drive(s) on primary well pump(s) and level control in head tank(s) and sump(s); 2) move all incubation, early rearing, and adult holding of steelhead and

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cutthroat trout to the Cowlitz Salmon Hatchery to improve the reliability of the water supply for these functions and allow the South wells to be dedicated to the supply of the Trout Hatchery's F-series ponds when the late winter steelhead are initially ponded; 3) at the Salmon Hatchery's denitrogen tower, any excess well water available is proposed to be additive to two adult holding ponds to provide a pathogen-light water supply; 4) recirculation ponds that are proposed as an innovative rearing practice would reduce demand for well water as they are estimated to require no more than 10% makeup water; and 5) depending on future research results, provide additional water treatment capacity in the future to satisfy spring Chinook salmon rearing criteria.

The licensee plans to conduct a series of replicated experiments using tagged or marked fish; tagged fish would be used to evaluate the benefits of innovative rearing practices and aid in the transition to innovative rearing. The licensee states that one measure of success would be an improvement in the contribution rate of adults produced from hatchery releases to common property fisheries and to escapement. Additionally, the licensee states that initial replicated experiments could commence as early as 2008, however, results would not be available for one or more generations depending upon the species tested. Program evaluation may not be completed until 2013, although returns and contributions of younger age classes would give indications of the degree of success for the innovative practices implemented prior to that year.

In the June 12, 2006 letter, the licensee states that as a result of the timing in the Commission's approval of their plan under Article 6 and fish life cycle constraints, the main construction at the Cowlitz Salmon Hatchery would be delayed by one year and is scheduled to start in the fall of 2007. For the Cowlitz Trout Hatchery, the licensee states that much of the work is either in progress or is scheduled to be completed by years end.

AGENCY CONSULTATION

Article 7 requires the licensee to prepare their plan in consultation with the FTC prior to filing the plan with the Commission. The licensee stated that several versions of their plan were submitted to the FTC, however, only the Washington Department of Fish and Wildlife (WDFW) commented on their plan. By letter dated November 23, 2004, the WDFW provided comments on the licensee's plan, which the licensee incorporated into their plan or provided further explanation. In their June 12, 2006 letter, the licensee states that the Commission's Order Modifying and Approving Fisheries and Hatchery Management Plan will have some impact on the design of the separation facility at the Cowlitz Salmon Hatchery, which they are currently working on with the National Marine Fisheries Service and the FTC. The licensee further states in their June 2006 letter that

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they continue to work with the resource agencies to assure that the final design will be flexible to meet both current plans and probable changes in the future.

DISCUSSION AND CONCLUSIONS

The licensee's Hatchery Remodel and Phase-In Plan should assist in providing: more efficient and less stressful fish movement, collection of all adult steelhead and cutthroat trout broodstock at the Cowlitz Salmon Hatchery separation facility, improved juvenile fish rearing with the new pond designs at the Cowlitz Salmon Hatchery, improved juvenile fish survival by installing exclusionary bird netting over rearing ponds, increasing pathogen-free water supply, improving incubation conditions by moving steelhead and cutthroat trout incubation and starter troughs to the Cowlitz Salmon Hatchery, and providing necessary flexibility to implement and evaluate innovative rearing practices.

The licensee's plan satisfies the requirements of SA Article 7 of the March 13, 2002 Order Approving Settlement and Issuing New License for the Cowlitz River Project. Therefore, the licensee's plan should be approved.

The Director orders:

(A) The Hatchery Remodel and Phase-In Plan, filed January 18, 2005 and supplemented by letter filed with the Commission on June 12, 2006, under Settlement Agreement Article 7 of the March 13, 2002 Order Approving Settlement and Issuing New License for the Cowlitz River Project as amended by the July 9, 2004 Order Amending License, is approved.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days from the date of issuance of this order, pursuant to 18 CFR § 385.713.

George H. Taylor
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