

EXECUTIVE SUMMARY

This draft environmental impact statement (DEIS) evaluates the potential effects on the environment associated with relicensing the 865.76-megawatt Rocky Reach Hydroelectric Project (project) No. 2145. The project is an existing, operating hydroelectric facility located on the Columbia River near the city of Wenatchee, Washington. The project occupies approximately 1,500 acres, of which about 152 acres are federal lands managed by the Bureau of Land Management and the Forest Service. The project is licensed to Public Utility District No. 1 of Chelan County (Chelan PUD). The current project license expires on June 20, 2006. Chelan PUD filed an application on June 30, 2004, for a new license with the Federal Energy Regulatory Commission (Commission or FERC) for the continued operation and maintenance of the existing project. No new capacity is proposed.

In this DEIS, we, the Commission staff, assess the environmental and economic effects of: (1) continuing to operate the project with no changes or enhancements (no-action alternative); (2) operating the project as proposed by Chelan PUD (Chelan PUD's proposal); and (3) operating the project as proposed by Chelan PUD with additional or modified environmental measures (staff alternative).

NO-ACTION ALTERNATIVE

The no-action alternative is intended to describe the environment as it exists today, and to describe a baseline by which we judge the benefits and costs of any needed measures that would be applied under a new license. In June 2004 the Commission amended the project's existing license to include the Anadromous Fish Agreement and Habitat Conservation Plan (HCP) for the Rocky Reach Project. In accordance with the amended license, Chelan PUD has begun to implement the HCP, but implementation is still in the early stages. Much of the cost of implementing the HCP is still to be expended and the expected benefits of the HCP have not begun to accrue; most of these costs and benefits would begin to accrue during the term of any new license that may be issued. Including future HCP measures as part of the no-action alternative would not reflect the environment as it exists today and would pre-judge the benefits and costs of including those measures in a new license. Therefore, to accurately differentiate between the no-action alternative (baseline), the proposed action (Chelan PUD's proposal, which includes full implementation of the HCP), and any other alternatives, we define the no-action alternative as project operations as it stood on January 12, 2005, when the Commission issued its Ready for Environmental Analysis notice. Under the no-action alternative, the project would continue to operate as it did at that time, without implementation of future HCP-mandated measures. No additional change to the current environmental setting in the project area would occur, and power generation would remain the same. No additional alterations or enhancements to existing environmental conditions would occur.

Under the no-action alternative, total average annual generation would be 6,030,900 megawatt-hours (MWh). Based on our estimate of the current cost of replacing this amount of power with no consideration of inflation over the 30-year period of our analysis, the average annual power value of the project under the no-action alternative would be \$237 million (about \$39/MWh) and the average annual cost would be \$79.9 million (about \$13/MWh), resulting in an average annual net benefit of \$157.0 million (about \$26/MWh).

CHELAN PUD'S PROPOSAL

Chelan PUD's proposal would implement the protection and enhancement measures detailed in its Final License Application. Measures included in Chelan PUD's proposal are: (1) implementing a Shoreline Erosion Management Plan; (2) implementing a Water Quality Management Plan; (3) continuing to implement the Anadromous Fish Agreement and Habitat Conservation Plan (HCP) for Rocky Reach to protect salmon and steelhead; (4) continuing to operate and maintain the project anadromous fish passage facilities, including the new juvenile fish bypass system and the adult fish ladder; (5) continuing and enhancing predator control programs; (6) implementing a White Sturgeon Management Plan; (7) continuing to implement the Bull Trout Management Plan approved by FERC on April 19, 2005; (8) implementing a Pacific Lamprey Management Plan; (9) implementing a Resident Fish Management Plan; (10) implementing a Comprehensive Wildlife Management Plan; (11) developing and implementing a Cultural Plan; and (12) implementing a Recreation Resources Management Plan. Specific measures included in each of the plans and programs are described in Section 3.0, *Environmental Analysis*.

Chelan PUD's proposal includes several substantial investments related to continuing implementation of the HCP, including \$130.0 million for eventual restoration and maintenance of the fish bypass and \$4.0 million for hatchery improvements. Chelan PUD's proposal also includes about \$16.7 million in recreational facility improvement. The measures included in this alternative would not change the project's installed or dependable capacity or its average annual generation. With the same average annual power value as the no-action alternative and with an average annual cost of \$96.8 million (about \$16/MWh), the average annual net benefit of Chelan PUD's proposal would be \$140.1 million (about \$23/MWh).

STAFF ALTERNATIVE

The staff alternative includes most, but not all, the measures proposed by Chelan PUD as well as measures either recommended by agencies pursuant to sections 18, 4(e), and 10(j) of the Federal Power Act (FPA) or recommended by staff. Measures proposed by Chelan PUD but not included in the staff alternative are: (1) habitat restoration and management at Chelan Wildlife Management Area; (2) ball field development; and (3) establishment of a recreation fund. New measures included in the staff alternative are:

(1) conducting temperature monitoring from August through October for up to 3 years to facilitate modeling late summer and early fall temperature conditions; (2) developing an operations plan and revising it annually until the state water quality standard for total dissolved gas is met; (3) implementing upstream Pacific lamprey passage activities; (4) developing and implementing a plan to monitor and control aquatic invasive species; (5) expanding current wildlife surveys to include other species and potential habitat enhancement projects; (6) maintaining the native habitat on Chelan PUD's Sun Cove properties in its current condition and bringing the properties into the project boundary; (7) including in the Recreation Resources Management Plan the Washington Department of Fish and Wildlife's (WDFW) recommendations for habitat protection at Lincoln Rock State Park, Entiat State Park, and the Entiatqua Trail; (8) every 6 years, in concert with the FERC Form 80-Recreation Report, filing a report with the Commission summarizing the RR Recreation Forum and Forum subgroup discussions; (9) conducting recreational use monitoring and ongoing assessment of other recreation-related effects on BLM lands within the project boundary; and (10) developing an information and education program as a component of the Recreation Resources Management Plan.

Under the staff alternative, the project would have the same power benefit as for Chelan PUD's proposal and the no-action alternative. With the same average annual power value as the no-action alternative and Chelan PUD's proposal and with an average annual cost of \$96.4 million (about \$16/MWh), the average annual net benefit of the staff alternative would be \$140.4 million (about \$23/MWh).

The staff alternative does not include some aspects of the 4(e) conditions filed by Interior on behalf of the Bureau of Land Management. We do not include in the staff alternative Interior's recommendation that Chelan PUD provide to BLM funds of up to \$40,000 annually for management of BLM lands within the Rocky Reach Wildlife Area, because these lands are not within the project boundary and have no project nexus. We recognize that the Commission may include valid section 4(e) conditions in any license issued for the Rocky Reach Project.

The staff alternative also does not include some of the recommendations filed by Interior and WDFW, pursuant to section 10(j) of the FPA. Both agencies recommend that Chelan PUD develop and implement a White Sturgeon Management Plan, recommendations that we adopt in all but one respect. Interior recommends that Chelan PUD begin construction of a white sturgeon hatchery in year 2 of a new license; WDFW recommends that construction begin in year 3. We recommend instead that as part of developing the White Sturgeon Management Plan, Chelan PUD consult with the agencies and tribes and establish biological criteria that would trigger construction of a hatchery facility. Achievement of the criteria would be assessed through monitoring and evaluation of initial white sturgeon supplementation efforts that are part of the proposed plan. The staff alternative also does not include Interior's and WDFW's recommendation that Chelan PUD fund WDFW's implementation of the comprehensive wildlife

management plan measures addressing restoration and management of the Chelan Wildlife Management Area. We do not recommend these measure because they include substantial funding for managing state and federal lands outside the project boundary that are not affected by the project. However, we are recommending some of Interior’s measures, including a noxious weed management plan, wildlife surveys, and improved opportunities for the public to interact with nature.

CONCLUSION

We chose the staff alternative as the preferred alternative because: (1) the project would provide a significant and dependable source of electrical energy for the region (6.0 million MWh annually); (2) the project would avoid the need for an equivalent amount of fossil fuel-fired electric generation and capacity, thereby continuing to help conserve these nonrenewable energy resources and reduce atmospheric pollution; and (3) the protection, mitigation, and enhancement measures proposed by Chelan PUD, as modified and combined with the additional measures recommended by staff, would adequately protect and enhance environmental resources and mitigate impacts of the project.

The overall benefits of this alternative would be worth the cost of proposed environmental measures and would outweigh the consequences of not implementing the other alternatives or of license denial.