

EXECUTIVE SUMMARY

On April 30, 2004, Puget Sound Energy, Inc. (Puget) filed an application with the Federal Energy Regulatory Commission (FERC or Commission) for a new license to continue operation of the existing Baker River Hydroelectric Project (FERC No. 2150-033). The existing 170.03-megawatt project (proposed installed capacity is 200.03 megawatts) is located on the Baker River in Whatcom and Skagit Counties, Washington. The project occupies 5,207 acres of lands within the Mt. Baker-Snoqualmie National Forest managed by the U.S. Forest Service.

Puget used the Commission's alternative licensing procedures and filed an applicant prepared Preliminary Draft Environmental Assessment (PDEA) with the application for a new license. The PDEA evaluated the effects of continued project operation as proposed in Puget's new license application.

On November 30, 2004, Puget filed a Settlement Agreement signed by Puget, 11 governmental agencies, three tribes, eight non-governmental organizations, and one citizen representative (the Settlement Parties). Puget then filed an amended license application and revised PDEA on January 31, 2005, which reflects the Settlement Agreement.

The Settlement Agreement contains 50 proposed license articles that Puget and the Settlement Parties recommend the Commission incorporate into the new license. The proposed articles describe how Puget would operate the project and Puget's responsibilities for certain protection, mitigation, and enhancement measures including measures related to: geology and soils, water quantity and quality, aquatic resources, terrestrial resources, threatened and endangered species, cultural resources, recreation, aesthetics, and land uses.

This final environmental impact statement (EIS) analyzes the effects of the No-Action Alternative, Proposed Action (Settlement Agreement), and a Staff Alternative. Commission staff (lead agency) prepared this final EIS in cooperation with the U.S. Army Corps of Engineers (cooperating agency) pursuant to 40 CFR 1501.6 of the National Environmental Policy Act.

NO-ACTION ALTERNATIVE

Under the No-Action Alternative, the Baker River Project would continue to operate under the terms and conditions of the existing license, and no new environmental protection, mitigation, or enhancement measures would be implemented. Commission staff use this alternative as the baseline against which we evaluate other alternatives.

With the average annual generation of 723,320 megawatt-hours (MWh), the existing project costs \$8,985,900 annually to operate, has power benefits of about \$39,366,300 and has net annual benefits of about \$30,380,400.

PROPOSED ACTION

Under the Proposed Action, Puget would implement the protection, mitigation, and enhancement measures contained in the Settlement Agreement. These measures address: (1) fish propagation; (2) upstream and downstream fish passage; (3) reservoir operations and flow releases; (4) gravel and woody debris; (5) shoreline erosion control; (6) historic properties; (7) recreation facilities; (8) water quality; (9) terrestrial resources including wildlife and threatened and endangered species; (10) committees to implement the Settlement Agreement; (11) funds for terrestrial, recreation, aquatic and cultural resources; and (12) adaptive management.

Under the Proposed Action, the project would cost \$20,734,900 annually to operate (\$11,749,000 more than under the No-Action Alternative), have annual power benefits of \$37,440,400 (\$1,925,900 less than under the No-Action Alternative) and have a net annual benefit of \$16,705,500 (\$13,674,900 less than under the No-Action Alternative). The project's average annual generation would be 722,019 MWh (1,301 MWh less than under the No-Action Alternative).

STAFF ALTERNATIVE

After evaluating the Proposed Action, and recommendations from resource agencies, non-governmental organizations, and other interested parties, we considered what, if any, additional protection, mitigation, or enhancement measures would be necessary or appropriate with continued operation of the project. The Staff Alternative consists of the Proposed Action with these additional or modified environmental measures, which include agency recommendations made pursuant to sections 18, 4(e), and 10(j), or modifications thereof, as noted. Additional staff recommended measures include: (1) a flow continuation study to determine the need for valves, other equipment, and operating procedures at the Lower Baker dam to maintain minimum flows during project outages and a plan to install such facilities if warranted, and (2) access, records, and notification procedures to help resource agencies and tribes remain informed about the construction and operation of fish protection measures at the project.

Under the Staff Alternative, the project would cost \$20,235,200 annually to operate (\$11,249,300 more than under the No-Action Alternative), have annual power benefits of \$37,440,400 (\$1,925,900 less than under the No-Action Alternative), and have a net annual benefit of \$17,205,200 (\$13,175,200 less than under the No-Action

Alternative). The project's average annual generation would be 722,019 MWh (1,301 MWh less than under the No-Action Alternative and equivalent to the Proposed Action).

Section 10(j) of the Federal Power Act (FPA) requires the Commission to include license conditions based on recommendations provided by federal and state fish and wildlife agencies. We have addressed the concerns of federal and state fish and wildlife agencies and have made recommendations, one of which is inconsistent with those of the agencies. We have determined that one recommendation made by FWS and WDFW is inconsistent with the FPA. The staff alternative does not include this measure, which would require Puget to develop a plan to acquire, protect, and enhance low-elevation bottomland ecosystems in the Skagit River basin focusing on habitat for anadromous salmonids, other aquatic species, and riparian-dependent birds and amphibians. We discuss this measure in the relevant resource section of this final EIS and summarize the basis for our determination in section 5.2, Fish and Wildlife Agency Recommendations.

The staff alternative also does not include the following proposed measures: (1) a Baker reservoir water safety plan, (2) law enforcement, (3) various contingency funds, and (4) certain adaptive management provisions.

CONCLUSION

We choose the Staff Alternative as the preferred alternative because: (1) the project would provide a significant (722,019 MWh) and dependable source of electrical energy for the region, (2) the project would avoid the need for an equivalent amount of fossil-fueled electric generation and capacity, thereby continuing to help conserve these nonrenewable energy resources and reduce atmospheric pollution, and (3) measures recommended by staff would adequately protect and enhance environmental resources and mitigate the impacts of the project.

The overall benefits of this alternative would be worth the cost of the proposed environmental measures and would outweigh the consequences of the other alternatives or license denial.