1.0 PURPOSE OF ACTION AND NEED FOR POWER

On April 30, 2004, Puget Sound Energy, Inc. (Puget) filed an application with the Federal Energy Regulatory Commission (Commission or FERC) for a new license for the existing Baker River Hydroelectric Project ("Baker River Project" or "project"). On January 31, 2005, Puget filed an amended application reflecting the terms of the "Baker River Hydroelectric Project Comprehensive Settlement Agreement" (Settlement Agreement) filed with the Commission on November 30, 2004.[6]

The project, consisting of two developments, has a total installed capacity of 170.03 megawatts (MW) and generates an average of about 708,000 megawatt-hours (MWh) of energy annually (1981-2002). Puget proposes to construct an auxiliary powerhouse at the Lower Baker Development and install two new turbine-generator units which would add 30 MW of installed capacity to the project. Puget proposes other construction-related activities, as contained in the Settlement Agreement, and described in this draft EIS.

The project is located in Whatcom and Skagit Counties, Washington, immediately north and partly within the boundary of the Town of Concrete (figure 1-1). About 5,207 acres of the 8,526.8 acres of total project lands (including submerged lands) are located within the boundary of the Mt. Baker Snoqualmie National Forest. The project currently operates under a license issued by the Commission on May 1, 1956, which expires on April 30, 2006.

1.1 PURPOSE OF ACTION

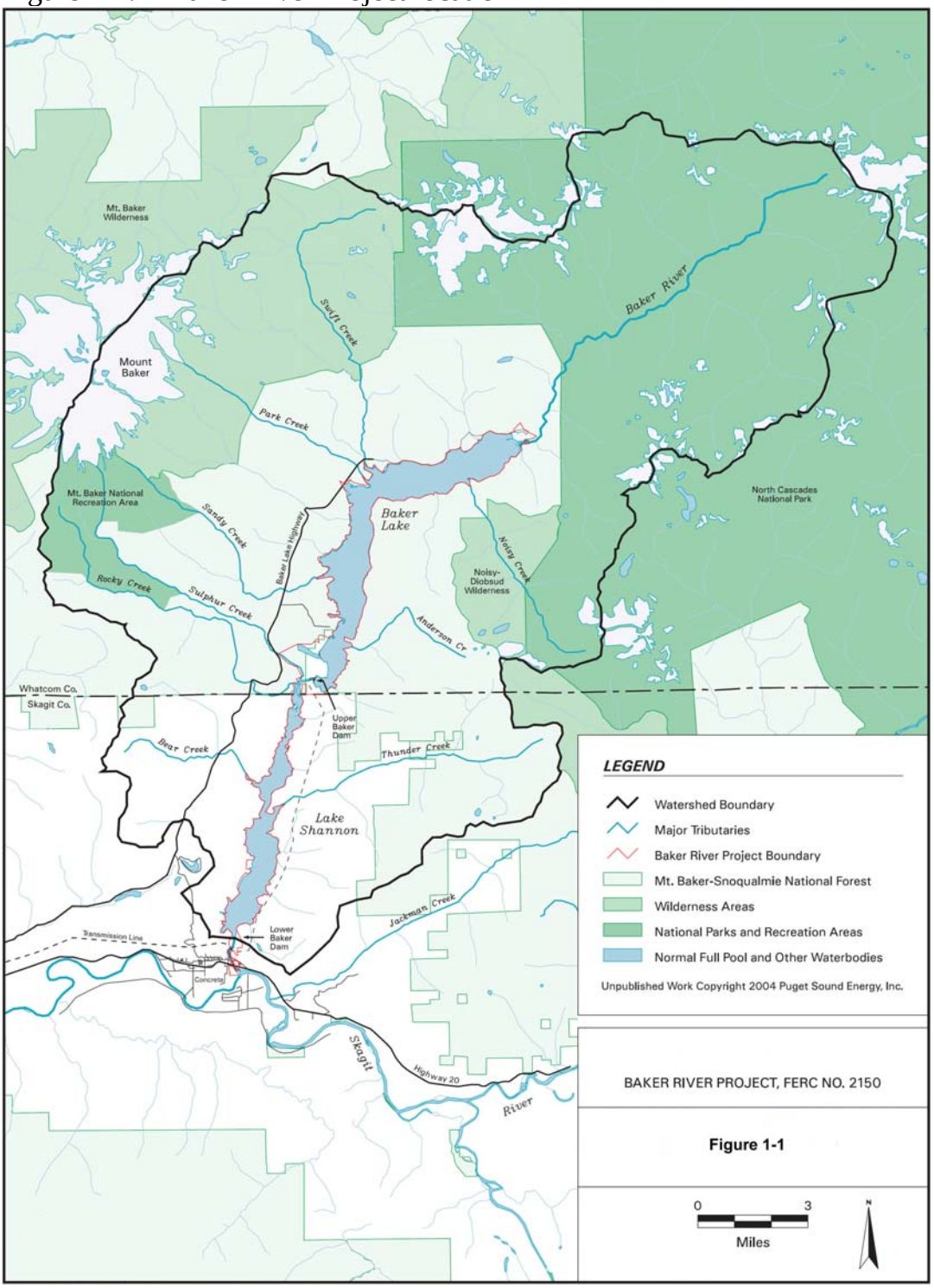
The Commission must decide whether to relicense the project and what conditions should be placed on any license issued. In deciding whether to authorize the continued operation of the project and related facilities in compliance with the Federal Power Act (FPA) and other applicable laws, the Commission must determine that the project will be best adapted to a comprehensive plan for improving or developing a waterway. In addition to the power and developmental purposes for which licenses are issued, the Commission must give equal consideration to the purposes of energy conservation; the protection of, mitigation of damage to, and enhancement of fish and wildlife (including related spawning grounds and habitat); the protection of recreational opportunities; and the preservation of other aspects of environmental quality.

In this draft EIS, we assess the environmental and economic effects of: (1) continuing to operate the project as it is currently operated (No-Action Alternative); (2) operating the project in accordance with the Settlement Agreement (Proposed Action);

[6] Puget filed an erratum to the Settlement Agreement on May 10 and July 5, 2005.

and (3) operating the project with modifications recommended by staff (Staff Alternative). We also consider federal takeover, nonpower license, and project retirement options. Briefly, the principal issues addressed in this draft EIS include: (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.

Figure 1-1. Baker River Project location



1.2 NEED FOR POWER

Puget is an investor-owned utility that provides electric service to approximately 958,000 residential, commercial, and industrial customers in the State of Washington. Puget's customers are located in a service territory covering approximately 6,300 square miles extending from Olympia to Bellingham and including the greater Everett/Seattle/Bellevue/Tacoma area.

As of year-end 2002, Puget's peak electric power resources were approximately 4,577 MW, and Puget's historical peak load (occurring December 21, 1998) was 4,847 MW (Puget, 2003a).

Puget meets the majority of its customers' peak power needs (about 61 percent in 2002) through power purchases from multiple generating sources including various mid-Columbia public utility districts and non-utility generators. Puget-controlled generating plants provide the remaining 39 percent of the peak demand of its customers (Puget, 2003a). Hydroelectric resources account for about 17 percent of Puget's company-controlled capacity, and the Baker River Project represents over half (about 57 percent) of Puget's company-controlled hydroelectric resource base.

Puget expects its electric sales to grow (base case forecast) at an average annual rate of 1.4 percent, from 2,181 average megawatts (aMW) in 2002 to 2,891 aMW in 2022. This forecast is driven primarily by the absorption of new customers, and it incorporates anticipated conservation savings. Without conservation savings, the forecasted base case average annual growth rate would be 1.7 percent. Compared to the historical growth rate of 2.1 percent per year, the forecast is lower as a result of a ramp-up in conservation program savings, slower growth in population and employment in the near term, and an increasing share of multi-family residential units, which have lower use per customer. Puget forecasts increased peak loads over time as the number of customers increases. The forecasted annual rate of growth in the peak loads (about 1.6 percent) is slightly higher than the growth rate in energy needs (about 1.4 percent) since residential energy load is growing faster than non-residential, and the residential sector makes a larger contribution to peak demands. Puget forecasts peak load to grow from 4,670 MW in 2002 to 6,384 MW in 2022 (Puget, 2003b).

The loss of existing resources, including the expiration of power supply and non-utility generation contracts, significantly affects Puget's load-resource outlook. Puget will lose 314 aMW of energy and 755 MW of capacity by 2010 due to the expiration of current power supply contracts, and will lose another 600 aMW of energy through the expiration of hydropower and non-utility generator contracts by 2012.

Based on forecasted load growth and on scheduled expiration of existing power purchase contracts, Puget has a shortage of 385 aMW of energy in 2004, growing to 1,551 aMW by 2013 and 2,229 aMW by 2023. With regard to peaking capacity, Puget identifies a need for additional capacity of 1,403 MW in 2004, rising to 3,385 MW in 2013 and 4,590 MW by 2023 (Puget, 2003b).

For the Pacific Northwest region as a whole, the Northwest Power and Conservation Council (NWPCC)[7] estimates a loss of load probability ranging from less than 1 percent to about 6 percent in the years 2004–2006, depending primarily on the amount of power available for import from other regions (NWPPC, 2003). According to the Pacific Northwest Utilities Conference Committee (PNUCC), the combined energy forecast of the Northwest Regional Planning Area utilities has been adjusted downward from 2000 through 2003, primarily because of the region's economic downturn (PNUCC, 2003). Meanwhile, during the same period, there has been substantial new resource development in the region (2,650 MW of generating capacity). The majority of this new generation is in the form of combined-cycle combustion turbines and wind projects. Although construction of three projects totaling 1,200 MW has been suspended and other projects in the planning process have been slowed, delayed, or abandoned, there is still substantial regional capacity (approximately 17,300 MW) in various stages of planning. The reduction in demand and the development of additional generation has translated into an improved regional surplus/deficit situation. Although the decade of the 1990s saw a growing energy deficit, the PNUCC reports a trend from 2000 to 2003 back toward a regional supply/demand balance (PNUCC, 2003).

The Baker River Project, with an installed capacity of 170.03 MW, generated an annual average of 708,000 MWh, or about 81 aMW, over a 22-year period from 1981 through 2002. This is equivalent to supplying energy to about 57,249 homes per year. Overall, the project accounts for about 3.7 percent of Puget's peak power resources and about 2.6 percent of Puget's average annual generation. If relicensed, the project would continue to contribute toward meeting Puget's power requirements and to regional power supply sufficiency.

1.3 INTERVENTIONS

On July 1, 2004, the Commission issued a notice that Puget had filed an application for a new license for the Baker River Project. This notice set September 30, 2004, as the deadline for filing protests and motions to intervene. In response to the notice, the following entities filed motions to intervene:

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[7] Prior to July 2003, the NWPCC was known as the Northwest Power and Planning Council.

Intervenors	Date Filed
Washington Department of Ecology	July 19, 2004
U.S. Department of the Interior	September 14, 2004
Washington Department of Natural Resources	September 24, 2004
Washington Department of Fish and Wildlife	September 24, 2004
U.S. Forest Service	September 24, 2004
Upper Skagit Indian Tribe	September 27, 2004
Sauk-Suiattle Indian Tribe	September 28, 2004
Swinomish Indian Tribal Community	September 28, 2004
The Nature Conservancy	September 28, 2004
National Marine Fisheries Service	September 29, 2004
Skagit County	September 30, 2004
Seattle City Light	September 30, 2004

1.4 SCOPING PROCESS

Commission staff conducted early scoping, as requested by Puget in its letter filed March 12, 2002. A scoping document (SD1) was distributed to interested agencies, non-governmental organizations (NGO), and others on April 19, 2002. Scoping meetings were held on May 21 and May 22, 2002, in Concrete and Mt. Vernon, Washington, respectively. A notice for these meetings was published in the Federal Register and in local newspapers. A court reporter recorded all comments and statements made at the scoping meetings. All comments and statements have been made a part of the Commission's public record for this project. In addition to oral comments provided at the scoping meetings, the following entities provided written comments:

Commenting Entities	Date Filed
Washington Department of Ecology	May 22, 2002
National Park Service	July 8, 2002
Washington State Department of Natural Resources	July 22, 2002
Washington State Department of Fish and Wildlife	July 22, 2002
Skagit County	July 23, 2002

Skagit System Cooperative	July 23, 2002
Skagitonians to Preserve Farmland	July 24, 2002
U.S. Fish and Wildlife Service	October 17, 2002

Commission staff issued a second scoping document (SD2) addressing the above comments on May 8, 2003.

1.5 AGENCY CONSULTATION

On January 19, 2005, the Commission issued a notice accepting Puget's license application and requesting final recommendations, terms and conditions, and prescriptions for the project. This notice set March 21, 2005, as the deadline for these filings. In response to the notice, the following entities filed recommendations, terms and conditions, and prescriptions:

Commenting Entities	Date Filed
National Marine Fisheries Service	March 16, 2005
U.S. Forest Service	March 21, 2005
Swinomish Indian Tribal Community	March 21, 2005
Sauk-Suiattle Indian Tribe	March 21, 2005
U.S. Department of Interior	March 21, 2005
Washington Department of Fish and Wildlife	March 21, 2005

1.6 SETTLEMENT AGREEMENT

On November 30, 2004, Puget filed a comprehensive Settlement Agreement for relicensing the project which includes various protection, mitigation, and enhancement measures in the form of 50 proposed license articles. The Settlement Agreement was intended to resolve all issues associated with issuing a new license. The parties to the Settlement Agreement are: Puget; U.S. Forest Service (Forest Service); U.S. Fish and Wildlife Service (FWS); National Park Service (Park Service); National Marine Fisheries Service (NMFS); Upper Skagit Indian Tribe; Sauk-Suiattle Indian Tribe; Swinomish Indian Tribal Community; Washington Department of Ecology (Ecology); Washington Department of Fish and Wildlife (WDFW); Washington Department of Natural Resources (WDNR); Skagit County; City of Anacortes; Town of Concrete; Public Utility District No. 1 of Skagit County; Interagency Committee for Outdoor Recreation; The Nature Conservancy; North Cascades Conservation Council; North Cascades Institute; Rocky Mountain Elk Foundation; Skagit Fisheries Enhancement Group; Washington

Council of Trout Unlimited; Wildcat Steelhead Club; and Bob Helton. Appendix A to this draft EIS contains a copy of the 50 proposed articles included in the Settlement Agreement.

On December 3, 2004, the Commission issued a notice that Puget had filed a Settlement Agreement for relicensing the project. This notice set December 23, 2004, as the deadline for filing comments and January 3, 2005, as the deadline for filing reply comments. In response to the notice, the following entities filed comments and reply comments:

Comments on the Settlement Agreement	Date Filed
U.S. Army Corps of Engineers	December 21, 2004
Puget Sound Energy	December 22, 2004
U.S. Forest Service	December 22, 2004
National Marine Fisheries Service	December 22, 2004
Sauk-Suiattle Indian Tribe	December 22, 2004
Swinomish Indian Tribal Community	December 22, 2004
Washington Department of Fish and Wildlife	December 22, 2004
Skagit County	December 23, 2004
The Nature Conservancy	December 23, 2004
Upper Skagit Indian Tribe	December 27, 2004
U.S. Fish and Wildlife Service	January 4, 2005
Skagit Fisheries Enhancement Group	January 7, 2005

Reply Comments on the Settlement Agreement	Date Filed
U.S. Army Corps of Engineers	January 3, 2005
Puget Sound Energy	January 3, 2005
Sauk-Suiattle Indian Tribe	January 3, 2005
Swinomish Indian Tribal Community	January 3, 2005
Skagit County	January 3, 2005
The Nature Conservancy	January 3, 2005