

Yale Hydroelectric Project
FERC Project No. 2071

APPLICATION FOR NEW LICENSE FOR
MAJOR PROJECT
Volume I

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PacifiCorp
Portland, Oregon
April 1999

Yale Hydroelectric Project
FERC Project No. 2071

Executive Summary

PacifiCorp
Portland, Oregon
April 1999

EXECUTIVE SUMMARY FOR THE APPLICATION TO RELICENSE
THE YALE HYDROELECTRIC PROJECT
FERC PROJECT NO. 2071

1.0 INTRODUCTION

This executive summary provides an overview of PacifiCorp's application for a new license for the Yale Hydroelectric Project (FERC Project No. 2071). The project, located in southwestern Washington, is operated under a license granted by the Federal Energy Regulatory Commission (FERC) on April 30, 1951 and that will expire on April 30, 2001.

Since PacifiCorp began this relicensing process in 1995, extensive consultation has taken place with resource agencies, tribes, and the public. This consultation has guided the scope and breadth of environmental investigations that were conducted to evaluate the effects of continued operation of the Yale Project. The results of these investigations are documented in Exhibit E of this License Application. Additional investigations pertaining to the Yale Project are ongoing as part of a basin-wide, multi-project effects investigation.

2.0 PROJECT SETTING

The Yale Hydroelectric Project is located in the North Fork Lewis River basin on the flanks of the southern Cascade Mountains of Washington State, approximately 45 miles northeast of the City of Portland, Oregon. Project lands encompass portions of Cowlitz and Clark counties, Washington. The Yale Project is one of 4 hydroelectric projects on the North Fork Lewis River; from downstream to upstream, these 4 projects include Merwin (FERC No. 935), Yale, Swift No. 2 (FERC No. 2213), and Swift No. 1 (FERC No. 2111). Three of the projects (Yale, Merwin, and Swift No. 1) are owned and operated by PacifiCorp, while the fourth, Swift No. 2, is owned by Cowlitz County Public Utilities District (PUD) No. 1, and operated by PacifiCorp.

The FERC project boundary for the Yale Project forms an approximately 200-foot-wide PacifiCorp-managed corridor around the perimeter of Yale Lake. At full pool, Yale Lake covers 3,800 acres.

For purposes of the relicensing studies, the Yale study area boundary encompasses a 16,000-acre area in Clark, Cowlitz, and Skamania counties. Detailed studies were conducted within the FERC project boundary, while more general data were collected and analyzed for the larger 16,000-acre study area and on a regional scale.

Land in the vicinity of Yale Lake is in mixed private, state, and county ownership, with state and federal ownership dominating the region beyond the study area boundary. Adjacent and nearby lands include portions of the Gifford Pinchot National Forest and the Mount St. Helens National Volcanic Monument, both managed by the U.S. Forest Service. The Bureau of Land Management (BLM) retains a parcel of land in the project boundary. At the state level, lands in the vicinity are managed by the Washington State Department of Natural Resources, primarily for timber production. Other lands in the vicinity are owned by Clark County, as well as private entities. Primary land uses in the vicinity of the reservoir are forestry, rural residential sites, recreation, and some agriculture.

3.0 SUMMARY OF PROJECT OPERATIONS AND FACILITIES

The Yale Project is normally operated as a peaking facility during the day to generate energy during times of peak customer demand. During periods of high runoff, the plant is typically operated 24 hours a day. Operations are closely tied with those of the other 3 hydroelectric facilities in the basin, following a procedure that schedules generation, provides flood storage during periods of high runoff, and manages reservoir levels for recreation purposes. The licensed capacity of Yale is 134 MW, providing enough power to serve 50,000 residential customers.

The major components of the project include a zoned embankment dam known as Yale Dam, an adjacent earth-fill structure known as Saddle Dam, a 10.5-mile-long reservoir, a concrete chute-type spillway, a 2-unit powerhouse, outdoor step-up transformer, and a 10.5-mile-long transmission line. In addition, PacifiCorp has developed a number of recreation facilities around Yale Lake to accommodate visitors. Two day-use sites (Yale Park and Cougar Park) and 3 overnight facilities (Cougar Camp, Beaver Bay, and Saddle Dam) provide both water-based and land-based recreation opportunities.

4.0 RELICENSING PROCESS AND APPROACH TO YALE

Under the authority of the Federal Power Act, as amended by the 1986 Electric Consumers Protection Act, FERC is responsible for issuing licenses for the construction and operation of non-federal power projects. FERC is required to issue licenses based on “equal consideration” of both power and non-power values associated with a project. Any new license issued will contain conditions for project operation and maintenance that balance power generation with protection of key natural and social resource values.

PacifiCorp initiated this relicensing process in 1995 and prepared a First Stage Consultation Document for participant review in May 1996 (PacifiCorp 1996). This was

followed by a public meeting in early 1996 and PacifiCorp's response to the comments of participants in November 1996. Results of the first year of field investigations were compiled in an Interim Technical Report (ITR), distributed for participant review in January 1997 (PacifiCorp 1997). Results of both the 1996 and 1997 studies of key resources were presented in 4 Final Technical Reports, addressing Aquatic, Terrestrial, Cultural, and Recreation resources (PacifiCorp 1998 a-d). This information, along with the results of engineering studies, was summarized in the Draft Application for License that was distributed for participant review on August 6, 1998. A joint agency meeting was conducted in January 1999 to discuss the application and to review PacifiCorp's proposed responses to comments. These responses were distributed to the commenting parties in February 1999 and the Final License Application was revised to reflect this information.

Paralleling the Yale license process has been a watershed studies process for the North Fork Lewis River basin, designed to jointly assess the effects of all 4 of the hydroelectric projects operating there. This watershed studies process was initiated in February 1997 and was actively pursued throughout the following 18 months in a series of public meetings and study planning sessions. One of PacifiCorp's primary objectives in undertaking this watershed studies approach is to conduct investigations that facilitate the negotiation of a comprehensive settlement agreement with the relicensing participants.

An outcome of the watershed studies meetings was a decision on the part of PacifiCorp and Cowlitz County PUD to enter into a joint relicensing process for all 4 of their Lewis River projects. This plan was first documented in the form of a proposal to participants on August 18, 1997. Formal authorization to combine relicensing of the 4 projects and to follow FERC's alternative collaborative relicensing process was requested of the FERC in January 1999. In its April 2, 1999 letter approving this approach, FERC explained that it would initially review this Yale License Application for adequacy and then process it only as far as an acceptance notice. This processing delay will allow concurrent enhancement planning and environmental review of all 4 Lewis River hydroelectric projects.

The licenses for the Merwin and Swift Nos. 1 and 2 projects expire on April 30, 2006 (note: the license for the Merwin Project formerly expired in 2009; however, FERC authorized its accelerated expiration to facilitate concurrent review and renewal of the 4 Lewis River hydroelectric projects). Because the Yale license expiration date cannot be extended without an Act of Congress, the application is submitted at this time with limited enhancements. This supports the intent of PacifiCorp and Cowlitz County PUD to provide a more complete basin-focused enhancement package as an outcome of the multi-project effects assessment.

5.0 APPLICATION CONTENTS

PacifiCorp's Application for License is compiled in 3 volumes that contain each of the exhibits required by CFR 18, Subchapter B, Part 4 (Paragraph 4.51) and Part 16 (Paragraph 16.8) of the FERC's regulations. The organization and subject content of the exhibits are described below.

VOLUME I

- **Initial Statement**
This brief section identifies the applicant and responds to a number of FERC's regulatory requirements.
- **Executive Summary**
This section presents a brief summary of the application contents.
- **Exhibit A: Description of the Project.**
This exhibit presents information describing the physical facilities and engineering details about the Yale Project.
- **Exhibit B: Statement of Project Operation and Resource Utilization**
The method of operation and production capacity of the project are described in this exhibit.
- **Exhibit C: Construction History**
This exhibit describes the Yale Project construction history, including a tabulation of all significant improvements undertaken during the initial license period.
- **Exhibit D: Statement of Costs and Financing**
The cost to operate the project, as well as a comparison of what it might cost to replace the energy generated by the project, is presented in Exhibit D.
- **Exhibit F: General Design Drawings**
This exhibit provides schematic drawings of the general arrangement of the Yale Project facilities.
- **Exhibit G: Maps of the Project**
A series of project boundary maps are presented in this exhibit.
- **Exhibit H: General Information to be Provided by the Applicant**
Information describing PacifiCorp's qualifications to operate the project, the implications of license denial, and historical records pertaining to project operation are described in Exhibit H.

VOLUME II

- **Exhibit E: Environmental Report**
This exhibit presents a detailed description of the existing non-power resources in the Yale Project vicinity and a discussion of the environmental studies that were conducted. Resources examined in detail include water use and quality, aquatic resources, terrestrial resources, cultural resources, land use and management, recreation, and aesthetics/visual resources.

VOLUME III

- **Appendices to Exhibit E**
This volume presents 4 appendices that support Exhibit E. These include: a list documenting the consultation that was undertaken throughout relicensing, followed by copies of correspondence to and from PacifiCorp and its consultant team; an historic description and map of fish passage barriers in the basin; a listing of plants and animals observed in the basin; and a series of maps depicting the proposed recreation enhancement measures.

Yale Hydroelectric Project
FERC Project No. 2071

Initial Statement

PacifiCorp
Portland, Oregon
April 1999

INITIAL STATEMENT

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Application for License for Major Project - Existing Dam

- (1) PacifiCorp applies to the Federal Energy Regulatory Commission for a new license for the Yale Hydroelectric Project, FERC Project No. 2071. The following License Application has been prepared in accordance with Chapter 18 of the Code of Federal Regulations, Subchapter B, Part 4, Paragraph 4.51, License for Major Project - Existing Dam. PacifiCorp is the existing licensee, owner, and operator of the Yale Project. PacifiCorp also conducts business locally under the assumed name of Pacific Power and Light Company.

- (2) The location of the project is:

State:	Washington
Counties:	Cowlitz, Clark, and Skamania
Nearby Town:	Cougar
Stream:	North Fork of the Lewis River

- (3) The exact name and business address of the applicant are:

PacifiCorp
825 N.E. Multnomah Street, Suite 1500
Portland, Oregon 97232
(503) 813-5000

The exact name and business address of each person authorized to act as agent for the applicant in this application are:

Randy A. Landolt
Managing Director, Hydro Resources
PacifiCorp
825 N. E. Multnomah Street, Suite 1500
Portland, Oregon 97232
(503) 813-6650

Thomas H. Nelson
Law Offices of Thomas H. Nelson
825 N. E. Multnomah Street, Suite 1500
Portland, Oregon 97232
(503) 813-5890

- (4) The applicant is a domestic corporation and is not claiming preference under Section 7(a) of the Federal Power Act.

- (5) (i) The statutory or regulatory requirements of the state in which the project is located and that affect the project as proposed, with respect to bed and banks and to the appropriation, diversion, and use of water for power purposes, and with respect to the right to engage in the business of developing, transmitting, and distributing power and in any other business necessary to accomplish the purposes of the license under the Federal Power Act, are:

Chapter 90.03, Revised Code of Washington, governs the appropriation, diversion, and use of water for hydropower generation.

Sections 90.16.050, 90.16.060, and 90.16.090 of the Revised Code of Washington, empower the Washington Department of Ecology (WDOE) to assess a power production license fee.

Public Law 92-500, Public Law 95-217, Revised Code of Washington 90.48, and Washington Administrative Codes 173.201 and 173.225 define the requirements for Water Quality Certification.

- (ii) The steps which the applicant has taken or plans to take to comply with each of the laws cited above are:

PacifiCorp currently holds water rights for the purpose of hydroelectric generation at the Yale Project in the amount of 8,000 cfs. The Company also holds rights for 400,000 acre-feet of storage in Yale Lake.

PacifiCorp has consulted with the WDOE about deferring the Application for Certification pursuant to Section 401 of the Federal Clean Water Act. Documentation of that consultation and WDOE's recommendation to defer application submittal is presented on pages 223 and 224 of Volume 3 of this License Application. FERC's concurrence with this approach is documented in its letter of April 2, 1999, presented on page 255 of that same volume.

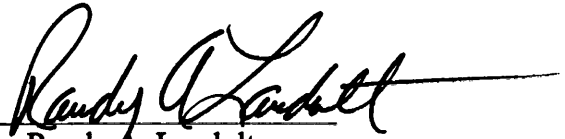
- (6) PacifiCorp is the owner of all existing project facilities.

STATE OF OREGON)

COUNTY OF MULTNOMAH)

Randy A. Landolt, Managing Director of Hydro Resources of PacifiCorp, 825 N.E. Multnomah Street, Portland, Oregon, 97232, being duly sworn, deposes and says that the contents of this application are true to the best of his knowledge or belief. The undersigned applicant has signed this application this 15th day of April, 1999.

PacifiCorp
Applicant

By: 
Randy A. Landolt
Managing Director, Hydro Resources

SUBSCRIBED AND SWORN TO before me, a Notary Public of the State of Oregon, this 15th day of April, 1999.




NOTARY PUBLIC

My Commission expires:
