

DEC 03 2003

WATER RESOURCES DEPT

## STATE OF OREGON WATER RESOURCES DEPARTMENT

Visit Services

# LICENSE HE 220 (FIFTH GENERATING UNIT AT THE RIVER MILL HYDROELECTRIC DEVELOPMENT)

## PORTLAND GENERAL ELECTRIC COMPANY

## A MAJOR PROJECT OF

# 6,666 THEORETICAL HORSEPOWER

NOTE: This order is a final order in other than a contested case and is subject to judicial review under ORS 183.484. Any petition for judicial review of the order must be filed within the time specified by ORS 183.484.

WHEREAS the Legislature of the State of Oregon has adopted ORS Chapter 543, as amended, also known as the Hydroelectric Act, under which the Water Resources Commission (WRC) is authorized and empowered to issue licenses to appropriate, initiate, perfect, acquire, and hold the right to the use of waters within the State, and to construct, operate, and maintain dams, reservoirs, powerhouses, conduits, transmissions lines, and all other works and structures necessary or convenient for the use of such waters in the generation and utilization of electricity; and

WHEREAS Portland General Electric Company (PGE or Licensee), a corporation organized under the State of Oregon and duly qualified to do business in Oregon with its principal place of business at 121 S.W. Salmon Street, Portland, Oregon, 97204-2901, has constructed and continues to operate the North Fork Project, including the River Mill Development, on the Clackamas River, tributary to the Willamette River, near Estacada, Oregon; and

WHEREAS on January 18, 1957, the Federal Power Commission (FPC) (now known as the Federal Energy Regulatory Commission or FERC) issued a license to PGE for the North Fork Project located on the Clackamas River; and pursuant to said license the Licensee has constructed the North Fork Project including the River Mill Development; and

WHEREAS in January 1960, PGE was directed by the Hydroelectric Commission of Oregon to submit an application for a state license for the fifth generating unit (Project) of the River Mill Development, and PGE submitted the application reserving the right to claim a pre-1909 vested water right for the River Mill Development; and such claim has not yet been evaluated and acted upon by the Oregon Water Resources Department (OWRD) as part of a general stream adjudication of the Willamette River and its tributaries; and

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WHEREAS on March 4, 1960, the Licensee made application to the Hydroelectric Commission of Oregon for a license for a power project designated as ALEM OREGON Project HE 220 on the records of the State Engineer (now known as OWRD), and by the Licensee as the fifth unit of the River Mill Development, and by the FPC as part of Project No. 2195. In its application, the Licensee has requested authority to construct, maintain, and operate certain Project works, necessary or convenient for the development, transmission, and utilization of electric power, and for the use of water of the Clackamas River, in Clackamas County Oregon; and

WHEREAS, in 1961, the Legislature passed ORS 543.135 which authorized the State Engineer to grant a hydroelectric license to certain projects licensed by the FPC, without public hearing, and authorized the State Engineer to waive and modify requirements of ORS 543.010 to 543.620 as the State Engineer finds to be in conflict with the federal license, and that license shall not be subject to referral to the Water Resources Commission; and

WHEREAS the duties of the Hydroelectric Commission were transferred to the State Engineer in 1961; and

WHEREAS the Legislature, in 1975 transferred the authority of the State Engineer to the OWRD Director (Director); and

WHEREAS the Director finds that the following provisions of ORS 543.510 to 543.620 are in conflict with the terms of the license issued by the FPC and are hereby waived:

ORS 543.410	(Time for construction)
ORS 543.420	(Time for construction)
ORS 543.520	(Amortization)

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WHEREAS the fifth unit at the River Mill Development is a major project for development of 6,666 theoretical horsepower with an installed capacity of 5,000 kilowatts (kW), the Licensee has paid to the State Engineer all fees required prior to the issuance of a license in accordance with the provisions of the Hydroelectric Act, and the Rules and Regulations of the OWRD; and

WHEREAS the Licensee has filed plans, maps and specifications as provided by ORS 543.290 and the Director finds that the Project is well adapted to the utilization of the water power involved and does not impair and is not detrimental to the public interest, and hereby approves the same;

Now THEREFORE, the Director hereby ISSUES this License to the Licensee for the purpose of operating and maintaining the Project works, hereinafter described, necessary or convenient for the development, transmission, and utilization of hydroelectric power and to appropriate, acquire, and hold the right to the use of the water

of the Clackamas River to the extent hereinafter set forth. This License is issued on condition that said Licensee shall comply with all terms and conditions of the Hydroelectric Act and Laws of Oregon relating thereto, and with the Rules and Regulations of the OWRD or the Water Resources Commission pursuant thereto as though fully set forth herein, except those specifically waived herein, and shall be subject also to the following express conditions, to wit:

## ARTICLE 1 Definition of Project

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Except where used with specific reference to the "North Fork Project", the word "Project" as used in this License means the fifth hydroelectric generating unit at the River Mill Development on the Clackamas River in Oregon. The word "Project" includes the complete unit, improvement or development including, among other things, powerhouses, waterwheels, conduits or pipes, dams and appurtenant works and structures, storage or diverting reservoirs, connected therewith, and primary lines transmitting power to the point of junction with a distributing system, or with any interconnected primary system, miscellaneous works and structures used in connection with the unit or any part thereof, rights of way, lands, flowage rights and all other properties, rights and structures necessary or appropriate in the use, operation, and maintenance of any such unit, which are associated with operation of the fifth unit at River Mill.

## ARTICLE 2 Description of Project

A general description of Project No. HE 220 is as follows:

The principal equipment installed for the fifth unit at River Mill consist of:

- (a) One turbine, horizontal double runner, Francis 300 RPM, 6825-horsepower, S. Morgan Smith Co.
- (b) One generator, indoor, 3-phase, 300 RPM, 11,000 volt, 5,000 kilovolt-ampere (KVA), 60-cycle, General Electric Co.
- (c) One oil circuit breaker, 15,000 volt, 600-amp, General Electric Co. (One unit of five in a metal-clad enclosure.)
- (d) One transformer, shared with Unit 4, 3-phase, 11,000-60,000 volt, 12,000/16,000 kVA, air cooled, Magnetek Co.

The fifth unit is located in the Licensee's River Mill powerhouse on the Clackamas River near Estacada, Oregon, in the NW ¼ of the NW1/4 of Section 20, Township 3 South, Range 4 East, W.M., Clackamas County, Oregon. This land is owned by the Licensee. The fifth unit has a full-gate requirement of 950 cubic feet per second (cfs) under a net head of 81 feet (all five units in operation). The maximum static head is 87 feet with 3 feet of flashboards, a full pond, and minimum tailwater with 300 cfs

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discharge. On the basis of mean natural flow, the fifth unit is estimated to produce 8,000,000 kilowatt hours (kWh) of energy annually.

The fifth unit at the River Mill Development was completed and operational by May 19, 1952. The installation involved connecting a turbine and 5,000 KVA generator to the penstocks and draft tubes which were installed when the River Mill Development was built. A 5,000 KVA transformer and an oil circuit breaker were also installed. The cost associated with construction (\$362,120) was paid at the time of installation. The original transformer was abandoned in place and its function assumed in 1995 by a new transformer that is shared with another turbine-generator. The electric power will be used for PGE's customers in Northwestern Oregon, and is combined in coordinated operation of the Northwest Power Pool.

## Description of the Dam and Reservoir at the River Mill Development:

A modified "Ambursen" hollow type reinforced concrete dam 936 feet long and approximately 85 feet high; a reservoir with capacity of 12,200 acre-feet at normal pool elevation of 389 feet; an indoor powerhouse containing five generating units having a total capacity of 19,100 kw (all five units), fish facilities, and appurtenant facilities. Note, however, that the water right granted in this License (HE 220) applies only to the fifth unit at the River Mill Development.

#### Exhibits:

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The location, character, and other details of the Project are more specifically shown and described by the following exhibits filed with OWRD, which are made a part of this water right:

Exhibit A	Articles of Incorporation for PGE.
Exhibit B	Certified Copy of Resolution of PGE.
Exhibit C	Location of Unit
Exhibit D	Statement of Compliance
Exhibit E	Appropriation of Water
Exhibit F	Ownership of Lands
Exhibit G	Financial Ability of Applicant
Exhibit H	Operation of Project
Exhibit I	Resources and Related Operational Characteristics

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Exhibits J, K Map of Estacada and Area Including Powerhouse and Dam

Exhibit L General Design Drawing for Fifth Unit at River Mill

Exhibit M Description and Specifications of Equipment

Exhibit N Cost

Exhibit O Completion Date

## ARTICLE 3 **Special Conditions**

- (a) No substantial changes shall be made in the maps, plans, specifications and statements described and designated as Exhibits herein until such changes have been filed with and approved by the State Engineer. To the extent any changes in maps plans or specification are hereafter approved by the State Engineer, the approval of such changes shall be deemed to amend the description of the License accordingly.
- (b) The Licensee shall construct, maintain and operate, or shall arrange for the construction, maintenance and operation of such facilities and equipment for fish migration, propagation or conservation as shall be set forth in the license from the FPC for Project No. 2195 and amendments thereto. In the event any modifications in the fish facilities are deemed necessary, the Licensee shall cooperate with the Oregon Department of Fish and Wildlife in the design of such modifications or operations of the facilities.
- (c) The Licensee shall maintain a minimum flow below the River Mill Development of 300 cfs.
- (d) The Licensee shall install and maintain continuous flow gauging that provides OWRD with real time access to the data via telephone or internet, when required by and at locations to be determined by the Director in connection with the flow requirements set forth in this Article. The existing United State Geological Service (USGS) gauge just downstream of the River Mill Development (USGS Gage No. 14210000) may be used for the official flow measurement.

#### ARTICLE 4 Access

All of the Project area, including access roads, shall be open to the general public for recreational purposes, except those closures necessary for public safety, and the safe and economical operation of the Project.

#### ARTICLE 5 Special Reports

The Licensee shall furnish detailed information and data concerning the Project, or any proposed modifications thereof, as may be required by the State Engineer. RECEIVED

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## ARTICLE 6 Jurisdiction

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In consideration of this License and of the benefits and advantages accruing hereunder to the Licensee, it is expressly agreed by the Licensee that the Project, Project area, and Project works shall be subject to all provisions, terms and conditions of this license. Should the Licensee be prevented from compliance with any provision of this license or of the Hydroelectric Act by the operation of any federal governmental agency exercising exclusive jurisdiction in the premises, it shall not be deemed to be in default or under any liability to the State of Oregon for failure to perform the same during the period of such disability.

# ARTICLE 7 Water Right Granted

This License grants the Licensee the right to use 950 cfs of the waters of the Clackamas River for the development of hydroelectric power at the fifth unit of the River Mill Development, and to use said waters and the impounded water as needed for the operation of the Project. The date of priority of the above appropriation of water is 3-4-1960.

# ARTICLE 8 Period of Water Right

The right to the use of the waters of the Clackamas River in connection with the development of this Project shall be vested in the Licensee during the time this license or any new license or lawful renewal is in force. This water right has a priority date of 3-4-1960, and shall terminate on 8-31-2006.

## ARTICLE 9 Annual License Fee

The Licensee shall pay the following annual license fees pursuant to ORS 543.300(5):

Annual fees for the period of 3-5-1960 through 2003 totaling \$48,794.47. Future annual fees for the period of 2004 through 8-31-2006 in the amount of \$1,866.66 per year, totaling \$4,976.06. The total of all annual fees over the course of the license period is \$53,770.53.

## ARTICLE 10 Additional Fees

The Licensee shall pay the following additional fees:

At the time this license is issued, the Licensee shall pay a one-time fee, in addition to other fees described in this license, in the amount of \$333.33, being 5 cents per theoretical horsepower. ORS 543.280(2).

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IN WITNESS WHEREOF, the Director has signed his name hereto this 200 day of 2003.

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Paul R. Cleary

This water right is conditioned upon acceptance by the PGE of all the terms and conditions of ORS 543.010 to 543.610, except as specifically waived herein, and such further terms and conditions as are set forth in this water right, not inconsistent with those sections. The following signature by an authorized representative of PGE indicates PGE's acceptance of all such terms and conditions.

Name, Title, for PGE

Date

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