

HYDROELECTRIC COMMISSION OF OREGON

LICENSE FOR PROJECT NO. 202

PORTLAND GENERAL ELECTRIC COMPANY

A MAJOR PROJECT OF

82,841 THEORETICAL HORSEPOWER

WHEREAS, by act of the Legislature of the State of Oregon (ORS 543.010 to 543.620 and ORS 543.990) hereinafter called the Hydroelectric Act, the Hydroelectric Commission of Oregon, hereinafter called the Commission, is authorized and empowered, inter alia, to issue licenses to appropriate, initiate, perfect, acquire and hold the right to the use of the waters within the State, including waters over which the State has concurrent jurisdiction, and to construct, operate and maintain dams, reservoirs, powerhouses, conduits, transmission lines, and all other works and structures necessary or convenient for the use of such waters in the generation and utilization of electricity, and to approve maps, plans, specifications and cost estimates, or changes therein, which, when approved, shall become a part of the license; and

WHEREAS, the Portland General Electric Company, hereinafter called the Licensee, a corporation organized under the laws of the State of Oregon and duly qualified to do business in Oregon, with its principal place of business at 621 S. W. Alder Street, Portland, Oregon, heretofore was granted a preliminary permit by the Commission, and thereafter, and while such preliminary permit was in full force and effect, made application in due and proper form to the Commission for a license for a power project designated as Project No. 202 on the records of the Commission,

and by the Licensee as North Fork Hydroelectric Project, and by the Federal Power Commission as Project No. 2195-Oregon, and for authority to construct, maintain, and operate in the County of Clackamas, State of Oregon, certain project works, necessary or convenient for the development, transmission and utilization of electric power, and for the use of the waters of Clackamas River, a tributary of Willamette River, for generation of such electric power; and

WHEREAS, this project is a major project for development of 82,841 theoretical horsepower with a proposed installed plant capacity of 53,000 kw; the applicant has paid to the Commission all fees required prior to issuance of a license in accordance with the provisions of the Hydroelectric Act and the Rules and Regulations of the Commission; and no application for said project, or in conflict therewith, has been filed by any municipality or public utility district; and

WHEREAS, the Licensee has filed maps, plans and specifications as required by ORS 543.290, and the Commission finds that the project will be well adapted to the utilization of the water power involved and hereby approves the same; and

WHEREAS, the Licensee on the 5th day of September, 1956 accepted in writing all the terms and conditions of this license for Project No. 202;

NOW, THEREFORE, the Commission hereby issues this license to the Licensee for the purpose of constructing, 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 use the waters of Clackamas

River to the extent hereinafter set forth. This license is issued on condition that said Licensee shall comply with all the terms and conditions of the Hydroelectric Act and Laws of Oregon relating thereto and with the Rules and Regulations of the Commission pursuant thereto as though fully set forth herein, and shall be subject also to the following express conditions, limitations and exceptions, to-wit:

ARTICLE 1. Definition of Project. The word "project" as used in this license means the complete unit, improvement, and development, including among other things, powerhouses, waterwheels, conduits or pipes, dams and appurtenant works and structures, storage, diverting or forebay 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 said 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.

ARTICLE 2. Description of Project. A concise, general description of Project No. 202 is as follows:

A concrete variable radius arch dam with a maximum height of approximately 190 feet and a crest length of approximately 676 feet will be located in the NW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 11, Township 4 South, Range 4 East, W.M. A spillway, designed for a maximum discharge of 150,000 cubic feet per second, will be located adjacent to the right abutment of the dam and will extend into the SE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 2, Township 4 South, Range 4 East, W.M. The spillway apron will terminate in the NE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 11 of said township and range. The spillway will be controlled by three 50 by 35 foot tainter gates.

A semi-outdoor type of power plant will be located at the base of the dam and will contain two generators each with a name plate rating of 24,000 kva at 80 p.f. and each driven by a vertical Francis type hydraulic turbine. Two penstocks, each 14 feet in diameter, will be installed through the base of the dam.

The reservoir in the Clackamas River canyon will be about one-quarter of a mile wide at the widest point and about four miles long. It will be about 150 feet deep at the dam.

The total quantity of water ponded in the reservoir at elevation 665 will be 19,500 acre feet. This will provide suitable pondage for daily and weekly operation of the hydroelectric plant when needed.

Exhibits. The location and character of the project are more specifically shown and described among the following designated Exhibits filed with the Commission, which are made a part of this license:

- Exhibit A: Certified copy of articles of incorporation of Portland General Electric Company;
- Exhibit B: Certified copy of resolution of the board of directors of Portland General Electric Company authorizing the filing of application for Project No. 202.
- Exhibit C: Description of location of project structures;
- Exhibit D: Statement of compliance with state laws;
- Exhibit E: Statement of nature and extent of the proposed appropriation of water;
- Exhibit F: Statement with respect to ownership of land;
- Exhibit G: Statement showing financial ability of Portland General Electric Company;
- Exhibit H: Statement on proposed operation of project;
- Exhibit I: Statement on power generation, power sources, and load requirements;

Exhibit J: General map of project;

Exhibit K: Map of project area, Sheets 1 and 2;

Exhibit L: Sheet 1 - General plan;  
Sheet 2 - General plant sections;  
Sheet 3 - Arch dam;  
Sheet 4 - Powerhouse plans;  
Sheet 5 - Cross section of powerhouse and intake;  
Sheet 6 - Plan of drill hole locations;  
Sheet 7 - Drill hole logs N-1 to N-20;  
Sheet 8 - Drill hole logs N-21 to N-36;  
Sheet 9 - One line wiring diagram.

Exhibit M: Statement giving general description of, and general specifications for mechanical, electrical and transmission equipment;

Exhibit N: Estimate of cost;

Exhibit O: Construction schedule.

Copies of specifications shall be filed with the Commission prior to construction.

No substantial changes shall be made in the maps, plans, specifications and statements described and designated as Exhibits herein until such changes have been approved by order of the Commission. To the extent any changes in maps, plans or specifications are hereafter approved by the Commission, the approval of such change shall be deemed to amend the description of the license accordingly.

ARTICLE 3. The Licensee shall construct, operate and maintain fish passage facilities in accordance with an agreement entered into August 21, 1956, with the Fish Commission of Oregon and Oregon State Game Commission which agreement by reference is made a part of this license.

ARTICLE 4. The Licensee shall furnish the Commission with a monthly progress report of construction of Project No. 202, included in

this report shall be a statement of the claimed cost covering each of the accounts involved.

ARTICLE 5. The Licensee shall furnish such detailed information and data as may be required by the Commission to enable the Commission, with the information and data heretofore submitted, to pass upon the safety and adequacy of all the structures which will be a part of Project No. 202.

ARTICLE 6. Period of License. This license is effective as of September 13, 1956, and shall terminate December 31, 2005, unless, as provided in ORS 543.520, the whole net investment of the project under this license shall be amortized and repaid prior thereto.

ARTICLE 7. Jurisdiction. In consideration of this license and of the benefits and advantages accruing thereunder to the Licensee, it is expressly agreed by the Licensee that the entire project, project area, and project works as hereinafter designated and described whether or not upon the lands of the United States, shall be subject to all provisions, terms, and conditions of this license. Should the Licensee be prevented from compliance with any provisions of this license or of the Hydroelectric Act by the operation of any valid Federal law, or the lawful order, rule or regulation 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 8. Time for Completion of Work. The Licensee shall complete the construction of the project works, on or before January 1, 1959, unless for good cause shown the Commission shall order and allow an extension of time for such completion.

ARTICLE 9. Water Right Granted. Subject to the provisions of ARTICLE 3 and prior appropriations, this license grants the Licensee the right to use 5,400 cubic feet per second of the waters of Clackamas River for the development of hydroelectric power at the North Fork hydroelectric dam and to impound all, or any part of said 5,400 cubic feet per second in the North Fork Hydroelectric Project reservoir to elevation 665, and to use the impounded water as needed for the operation of Licensee's hydroelectric project; provided that the quantity of water used at any time from the direct flow of the Clackamas River and from storage shall not exceed 5,400 cubic feet per second.

The date of priority of this appropriation of water is September 26, 1955.

ARTICLE 10: Period of Water Right. The right to the use of the waters in connection with the development of this project shall be vested with the Licensee during the time this license or any lawful renewal or extension thereof is in force.

ARTICLE 11. Annual License Fee. An annual license fee of \$12,426.15 shall be paid by the Licensee on or before January 1 of each calendar year for each of the calendar years 1959 to 2005, inclusive, being 15 cents for each of the 82,841 theoretical horsepower authorized herein for Project No. 202.

Should the terms and conditions of this license be extended at its expiration, the Licensee shall pay such annual fees as the Hydroelectric Commission of Oregon, or its successor having jurisdiction in the matter at the time, shall fix.

ARTICLE 12. Expenses of Examination. The Licensee shall pay to the State of Oregon pursuant to ORS 543.280 the expenses incurred

and to be incurred by the Commission in examining into the application for license, and maps, plans, specifications, cost estimates and other matters relating to the project, and the investigations from time to time of acts done and work carried forward under the license until completion of the project.

ARTICLE 13. Depreciation. The amount of the annual charges for depreciation expenses to be included in the cost of operation shall be determined on a five percent sinking fund basis computed by use of service lives as determined by the Public Utilities Commissioner of Oregon, subject to the approval of the Commission; provided, that, for the purpose of depreciation, the service lives of the original units of property shall not exceed the unexpired period of this license; provided further, that the Commission may upon further determination and in its discretion extend the depreciation period of the original units of the project beyond the life of the license. In determining the amount of the annual charges for depreciation expense to be included in the cost of operation prior to the time of final action of the Commission in fixing the actual legitimate cost of the original project as provided for in ARTICLE 14 of this license, the original legitimate cost of the items in each account number as set forth in the "Initial Cost Statement" to be filed by the Licensee, as provided for in said Article, shall be used.

ARTICLE 14. Determination of Cost of Project.

(a) Initial Cost Statements: The Licensee shall file within one year after the time the project is ready for service, an initial statement, under oath, with three additional conformed copies thereof showing the amount claimed by the Licensee as the actual legitimate cost of the project, as defined in Subsection 2 of ORS 543.010, on forms as



now prescribed by the Federal Power Commission for this purpose, unless otherwise directed by the Commission. Similar statements with respect to net additions and betterments to the project shall be filed in the same manner before April 1 of each and every succeeding year during the term of this license or any lawful extension thereof, unless the Commission shall otherwise direct.

(b) Substance: Each statement so filed shall give full, adequate and complete information with respect to the cost of the project or additions and betterments thereto as the case may be. Any statement which does not contain sufficient information will be returned to the Licensee for such additional information as the Commission may deem necessary.

(c) Report on Project: When a satisfactory statement shall have been filed with the Commission, the Commission will file one copy of such with the Public Utilities Commissioner of Oregon, and the Commission's representatives will make an audit of the accounts, will analyze the books, cost records, engineering reports, and other records supporting such statement or pertaining to the project, will inspect the project works, and will prepare a report setting forth their findings and recommendations with respect to the cost as claimed.

(d) Service of Report: Copies of such report and of the final report provided for in subsection (g) of this ARTICLE 14, will be served by registered mail upon the Licensee at its principal place of business in Oregon and copies will be sent to the Public Utilities Commissioner of Oregon, the Federal Power Commission and such other parties as the Commission may prescribe.

(e) Time of Filing of Protest: Thirty days after service thereof will be allowed to the Licensee within which to file a protest

to such report. If no protest is filed within the time allowed, the Commission will issue such orders as may be appropriate. If a protest is filed a hearing will be ordered, such hearing to be held within 90 days from the filing of the protest with the Commission.

(f) Burden of Proof: The burden of proof to sustain each item of the statement of claimed cost as filed shall be upon the Licensee and only such items as are in the opinion of the Commission supported by satisfactory proof may be entered in the project accounts of the Licensee.

(g) Finding and Final Statement: Final action by the Commission will be in the form of a finding and order entered upon its minutes and served upon the Licensee, Public Utilities Commissioner of Oregon, the Federal Power Commission and such other parties as the Commission may prescribe. The Licensee shall thereafter file a final statement, under oath, in duplicate, with two additional copies thereof, showing the net investment revised in conformity with the order of the Commission, together with a statement showing that its records have been revised in conformity with such order.

ARTICLE 15. Reasonable Rate of Return: A reasonable rate of return on the net investment in the project shall be that established by the Public Utilities Commissioner of Oregon, subject to the approval of the Commission, but shall not exceed 6 percent per annum. The surplus earned and accumulated in excess of the reasonable rate of return for this project will be in proportion to the total surplus earned and accumulated by the Licensee, as determined by the Public Utilities Commissioner of Oregon, and any surplus earnings shall be apportioned on the basis that the net investment in this project, as determined by the Commission, bears to the total net investment of Licensee in its electric utilities

properties and such determination shall be subject to the approval of the Commission.

The formula to be used to determine the surplus earned and accumulated for this project as set out above will be as follows:

$$a = \frac{bx}{y}$$

in which

- a = the surplus earned and accumulated in excess of a reasonable rate of return for this project;
- b = total surplus earned and accumulated by the Licensee as determined by the Public Utilities Commissioner of Oregon;
- x = total net investment of Licensee in this project as determined by the commission;
- y = total net investment of Licensee in his electric utilities properties as determined by the Public Utilities Commissioner.

The determination of the Public Utilities Commissioner with respect to "b" and "y" shall be subject to the approval of the Commission.

ARTICLE 16. Amortization Reserve. Any earnings in excess of said reasonable rate of return as determined by the Public Utilities Commissioner of Oregon and as approved by the Hydroelectric Commission, shall be set up in Account 258-2. Miscellaneous Reserve, as a credit to the Amortization Reserve, pursuant to ORS 543.510, of the Hydroelectric Act, to be disposed of in accordance with order of the Commission.

ARTICLE 17. Accounting. For the purpose of this license and the accounting to be followed by the Licensee, the Commission adopts the Uniform System of Accounts prescribed by the Public Utilities Commissioner of Oregon for Class A and B Electric Utilities, effective January 1, 1937, and reserves the right to approve any revisions or modifications thereof.

ARTICLE 18. Bond of Licensee to Protect Laborers and Materialmen.

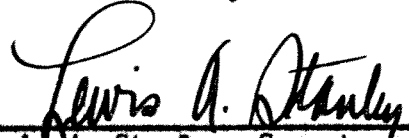
Before entering upon the construction of this project the Licensee shall execute a bond as required by ORS 543.560 in an amount of \$10,000, the form of which is to be approved by the Attorney General of Oregon, which bond shall be in addition to and not in lieu of any other liability of the Licensee principal.

IN WITNESS WHEREOF, the Hydroelectric Commission of Oregon has caused its name to be signed hereto at Salem, Oregon, this 13 day of September, 1956.

HYDROELECTRIC COMMISSION OF OREGON

  
George W. Joseph II, Chairman

  
Frank C. Dillard, Vice Chairman

  
Lewis A. Stanley, Secretary

IN TESTIMONY OF ACCEPTANCE of all the terms and conditions of the Hydroelectric Act, and of the further conditions imposed in the foregoing license, the Licensee, this 5th day of September, 1956, has caused its corporate name to be signed by O. E. Walsh, one of its Vice Presidents, and its corporate seal to be affixed hereto and attested by Clarence D. Phillips, its Secretary, pursuant to the resolution of its board of directors, duly adopted on the 28th day of August, 1956, a certified copy of the record of which is attached hereto.

By *O. E. Walsh*  
Vice President

SEAL

Attest:

*Clarence D. Phillips*  
Secretary

PORTLAND GENERAL ELECTRIC COMPANY  
CERTIFIED COPY OF RESOLUTION ADOPTED BY  
THE BOARD OF DIRECTORS

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RESOLVED, That the Vice President, O. E. Walsh, and the Secretary, Clarence D. Phillips, of this Corporation be and they hereby are authorized, empowered and directed for and on behalf of this Corporation, and as its corporate act and deed, to execute an acceptance of License for a Major Hydroelectric Project - Portland General Electric Company - Project No. 202, which said license provides for the construction, operation and maintenance of the North Fork Hydroelectric Project on the Clackamas River in Clackamas County, Oregon, and said officials are authorized to do and perform any and all acts necessary or desirable to effectuate the purpose of this resolution.

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I, Clarence D. Phillips, Secretary of Portland General Electric Company, hereby certify the above and foregoing to be a full, true and correct copy of a resolution adopted by the Board of Directors of said Corporation at a meeting thereof held on August 28, 1956; that there was then and there present and voted thereon a quorum of said Board; and that said resolution is in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation this 5th day of September, 1956.

  
Secretary

SEAL

A G R E E M E N T



THIS AGREEMENT, made and entered into this 21<sup>st</sup> day of August, 1956, by and between the FISH COMMISSION OF OREGON, hereinafter referred to as the FISH COMMISSION, the OREGON STATE GAME COMMISSION, hereinafter referred to as the GAME COMMISSION, both also being hereinafter referred to as the FISH AGENCIES, and the PORTLAND GENERAL ELECTRIC COMPANY, an Oregon Corporation, hereinafter referred to as the COMPANY,

WITNESSETH:

Whereas, the Company proposes to build a hydroelectric project on the Clackamas River, to be known as the North Fork Hydroelectric Project, and an addition to its Faraday Power Plant on the Clackamas River, to be known as the Faraday Addition; and

Whereas, the Hydroelectric Commission of Oregon, on the 12th day of April, 1956, issued a preliminary permit for the North Fork Hydroelectric Project, being Project No. 202, and a preliminary permit for the Faraday Addition, being Project No. 203, both of said preliminary permits having been duly accepted by the Company; and

Whereas, the Company, on June 29, 1956, filed with the Hydroelectric Commission of Oregon applications for licenses for Projects No. 202 and 203, which applications are still pending; and

Whereas, the Company, on October 31, 1955, filed with the Federal Power Commission an application for license for the North Fork Hydroelectric Project, being Federal Power Commission Project No. 2195; no application for license for the Faraday Addition was filed with the Federal Power Commission as the Company was of the opinion that a Federal Power Commission license was not necessary for the Faraday Addition; and

Whereas, the Company, on June 28, 1956, filed with the Federal Power Commission an amendment to the application for license for FPC Project No. 2195, which application is still pending; and

Whereas, a hearing was held by the Hydroelectric Commission on the applications for preliminary permits made by the Company for the above-described projects, at which hearing provisional protests to the subject projects were made by the Fish and Game Commissions; and

Whereas, the Company has consulted with the Fish Agencies regarding the fish problems in connection with the subject projects; and

Whereas, it has been agreed in principle that fish passage for both upstream and downstream migrants appears to offer the best solution to the fish problem; and

Whereas, the Fish Commission and Game Commission have been granted permission to intervene in the proceedings now pending before the Federal Power Commission in connection with the North Fork Hydroelectric Project; and

Whereas, if agreement could be reached between the Fish Agencies and the Company with respect to the facilities for the protection and preservation of fish, the necessity of a hearing on the Company's application for license to the Federal Power Commission would probably be obviated, and the Company believes a license could be issued in a comparatively short period of time; and likewise the Company believes licenses could probably be issued by the Hydroelectric Commission of Oregon for both projects in a similar short period of time:

NOW THEREFORE, by virtue of these premises and in consideration of the agreements to be kept and performed by the parties hereto, it is hereby mutually agreed as follows:



The Company agrees to provide, maintain and operate fish passage facilities as follows:

1. A fish ladder, approximately 10 feet wide, from immediately below the Cazadero Dam to the reservoir behind the North Fork dam.
2. A flow of approximately 43 cfs of water through the ladder; the exact amount for most efficient operation for fish passage purposes to be determined by trial.
3. During times of spill at least 80 cfs of additional water in the lower end of the ladder for attraction purposes.
4. A Buckley-type trap near the lower end of the ladder to be used during construction and thereafter if needed.
5. Tank trucks of standard design to transport the upstream migrants from the trap to a point to be determined by the Fish Agencies above the site of North Fork dam for release into the Clackamas River.
6. An artificial outlet at the North Fork dam with necessary accessories to attract downstream migrants into the fish ladder.
7. A facility in the lower end of the ladder to separate the downstream migrants from the upstream migrants.
8. A pipe or tube of transite or some similar material, approximately 16 to 20 inches in diameter, running from the facility described in 7 above to the Company's River Mill

dam so that the downstream migrants can be transported therein by gravity and discharged in the Clackamas River at or below River Mill dam.

9. Improvement of the river channel between Cazadero Dam and Faraday power plants. A minimum flow, as determined by the Fish Agencies, of between 50 and 90 cfs is to be provided in this stretch of the river. Additional circulating flow at the Faraday plant during times of minimum flow is to be provided if necessary.

10. Electric screening of the Faraday tailrace if necessary.

11. The fish ladder shall be so designed that it could at some future date be connected with a ladder from below the River Mill dam.

The Company further agrees to design the facilities described above in accordance with general design criteria to be supplied by the Fish Agencies and to reimburse the Fish Agencies for the cost of any direct technical assistance provided by the Fish Agencies in accordance with the terms of any agreement therefor.

The Company agrees to construct, operate and maintain, at its own expense, the fish facilities in a mutually agreed manner.

The Company understands that the execution of this agreement by the Fish Agencies does not relieve the Company from the obligation of complying with any existing or subsequent laws relating to the protection and preservation of fish.

The Company further agrees that the terms of this agreement may be incorporated in and made a part of any license issued to it by the Hydroelectric Commission of Oregon for Projects No. 202 and 203 and that it may likewise be made a part of any license issued to it by the Federal Power Commission in FPC Project No. 2195, in such manner as each commission may determine; also that the final structural plans and designs of fish protective facilities for such projects, as approved by the Fish Agencies, may become an exhibit to this agreement and be made a part of any license issued to it by either or both of said commissions for said projects, if they so prescribe.

The Fish Agencies agree that the proposed fish facilities offer the only plan now known and acceptable to both parties that appears to have a reasonable chance of success. However, it is understood that the execution of this agreement by the Fish Agencies shall not be construed to be an endorsement of the projects nor a guaranty that the fish facilities proposed will function adequately.

The Fish Agencies agree to provide timely criteria and technical consultation to the Company in the design of the fish facilities.

In the event of any dispute between the parties hereto over the design, construction, operation or maintenance of the fish facilities, it is agreed that insofar as permitted by law, the licensing agency or agencies having jurisdiction of the particular project or projects shall hear such dispute and make a final decision thereof.

Upon the inclusion of this agreement in the Hydroelectric Commission licenses for Projects No. 202 and 203, the Fish and Game Commissions of Oregon agree to withdraw their objections to the subject projects and agree

that they have no objection to the Federal Power Commission issuing a license for FPC Project No. 2195 so long as this agreement is made a part of such license.

IN WITNESS WHEREOF the parties hereto have executed the foregoing agreement this 21<sup>st</sup> day of August, 1956.

FISH COMMISSION OF OREGON

By M. C. James  
Director

OREGON STATE GAME COMMISSION

By P. H. Schneider  
Director

PORTLAND GENERAL ELECTRIC COMPANY

By Waldemar Paton  
Vice President

Attest: CLARENCE D. PHILLIPS  
Secretary