UNITED STATES OF AMERICA FEDERAL POWER COMMISSION

Before Nelson Lee Smith; Chairman; Leland Olds and Harrington Commissioners: Wimberly.

April 29, 1947.

In the Matter of City of Seattle, Washington

Project No. 553

ORDER AUTHORIZING AMENDMENT OF LICENSE (MAJOR)

- (1) An application was filed June 6, 1946, and later supplemented, by City of Seattle, Washington, licensee for major Project No. 553, requesting amendment of license as hereinafter specified.
- (2) This application contemplates construction of the third step of Ross Dam to raise the dam from elevation 1550 feet to elevation 1620 feet, plus or minus, at the roadway crest with the normal high water level in the reservoir at 1600 feet (top of spillway gates), creating a reservoir with a gross capacity of 1,400,000 acre-feet. The plans provide for two spillway sections near the abutments with fixed spillway crests at elevation 1582 feet, and such accessory or additional facilities as may be necessary.
- (3) The licensee proposes to complete the third step of Ross Dam, with the exception of installing spillway gates, by October 1948.
- (4) With normal high water level in the reservoir at 1600 feet the area of lands of the United States within the Ross Reservoir will be increased by 3,790 acres.
- (5) The Acting Director, U. S. Geological Survey, has recommended that gages and stream gaging stations be constructed, maintained and operated at the following locations:

Lightning Creek near Newhalem
Beaver Creek near Newhalem
Ruby Creek near Newhalem
Ross Dam, records of storage and waste
Thunder Creek near Newhalem
Diablo Dam, records of storage and waste
Stettattle Creek near Newhalem
Skagit River at Newhalem

(6) The Chief, Forest Service, who has supervision over the Mount Baker National Forest, has reported favorably on the application.

- Project No. 553 (Cont'd)
 - (7) The Chief of Engineers and the Secretary of War have approved the plans insofar as they affect navigation, and have recommended that during the period November 1 to April 1 200,000 acre-feet of storage be reserved in Ross Reservoir for the purpose of flood control and that methods of operating the reservoir in the interests of flood control be required as hereinafter provided.
 - (8) The Assistant Secretary of the Interior has recommended that continued responsibility for the protection of fisheries resources in the Skagit River remain with the State Department of Fisheries.
 - (9) The construction of the third step of Ross Dam with normal high water level in the reservoir at 1600 feet will cause the reservoir to extend into Canada. The International Joint Commission has authorized the licensee to raise the Ross Dam by stages to elevation 1725 feet on condition that satisfactory arrangements be made with the Province of British Columbia to provide for proper and adequate compensation to the Province for use of Crown lands. However, construction of the third step will affect only privately owned Canadian lands already acquired by the licensee. The Chairman, United States Section, International Joint Commission, has reported that his office has no objection to the granting of the pending application.

The Commission, having considered the application and the project record, finds that:

- (10) The license, further amended as hereinafter provided, will not interfere or be inconsistent with the purposes for which the Mount Baker National Forest or any reservation of public lands of the United States were created or acquired.
- (11) Although not required by the Act, public notice has been given.
- (12) Under present circumstances and conditions, and upon the terms heretofore and hereinafter imposed, the Ross Dam and Reservoir constructed to elevation 1620 feet with the normal high water level at 1600 feet constitutes a part of a comprehensive plan for the development of the Skagit River and will be best adapted to a comprehensive plan for improving and developing the Skagit River for the use and benefit of interstate or foreign commerce, for the improvement and utilization of water power development, and for other beneficial public uses, including recreational purposes.
- (13) As a measure for the protection of life, health and property, it is in the public interest to require the licensee to operate Ross Reservoir for the purpose of flood control as hereinafter provided.

- (14) The amount of the annual charge to be paid under the license, as further amended, for recombening the United States for the use, occupancy and enjoyment of its lands, exclusive of lands used for transmission line purposes, is reasonable as hereinafter fixed.
- (15) Exhibit L, Sheets R-284 to-286, inclusive, (FPC Nos. 553-105 to-107, inclusive) and Exhibit K, Sheets R-1 to-10, inclusive, and R-16 to-18, inclusive (FPC Nos. 553-38 to-50, inclusive) insofar as it pertains to the operation of Ross Reservoir to elevation 1600 feet, conform to the Commission's rules and regulations.
- (16) The licensee should file for approval before starting construction of the third step of Ross Dam Exhibit L drawings showing design details for the control of ice and debris on the Ross Dam.
- (17) The licensee should be required to construct, maintain and operate gages and stream gaging stations at the locations specified in paragraph (5).

It is <u>ordered</u> that:

- (18) The license be amended to authorize construction of the third step of Ross Dam to elevation 1620 feet, spillway crest at elevation 1582 feet, and the operation and maintenance of the project so constructed, subject to the following special conditions:
 - (a) The licensee shall begin construction of the third step on or before October 1, 1947, and shall complete such construction, with the exception of installing spillway gates, on or before October 1, 1948. The spillway gates shall be installed at such future date as the Commission may direct.
 - (b) The licensee shall file for approval before starting construction of the third step of Ross Dam the Exhibit L drawings described in paragraph (16).
 - (c) The licensee shall construct, maintain and operate gages and stream gaging stations at the locations specified in paragraph (5).
 - (d) Upon installation of the spillway gates it is provided that during the period November 1 to April 1 200,000 acrefeet of storage space in Ross Reservoir shall be reserved by the licensee for flood control and utilized as prescribed herein. The reservoir level will be drawn down to elevation

1,58215 by November 1 of each year. When the flow of the Skagit River at the gaging station below Concrete exceeds 25,000 second-feet (gage reading 21.0) on the rising stage of a flood, the licensee shall release only such flows from the Ross Dam as are necessary to the normal production of electric energy at the Ross, Diablo, and Gorge plants. Storing of flood waters shall continue until the water level of the reservoir approaches the top of the gates (elevation 1,600) at which time the spillway gates will be opened gradually so as to hold the reservoir surface at that level or until all gates are completely opened. If all gates are opened fully during the storage period, the discharge shall be uncontrolled until the receding pool level approaches elevation 1,600 at which time the spillway gates shall be closed gradually so that the pool level will be approximately elevation 1,600 by the time the inflow and discharge decrease to 10,000 second-feet. When the flow of the Skagit River at Concrete is 50,000 second-feet (gage reading 26.0) or less on receding flood stages and the pool level is at or below elevation 1,600, the stored flood waters in Ross Reservoir shall be released at a rate not to exceed 10,000 second-feet until the level drops to elevation 1582.5 feet.

- (19) Article 24 of the license be amended to change the annual charge for the purpose of recompensing the United States for the use, occupancy and enjoyment of its lands, other than those used for transmission lines only, from \$1,191.46 to \$1,699.32.
- (20) The maps, plans and specifications, specified in paragraph (15) as conforming to the Commission's rules and regulations are hereby approved as part of the license for the project, except that Exhibit K is approved only insofar as it pertains to the operation of Ross Reservoir to elevation 1600 feet.

By the Commission.

Leon M. Fuquay, Secretary.

Date of Issuance: May 2, 1947