

**IN THE MATTER OF THE APPLICATION OF THE GOVERNMENT OF THE UNITED STATES FOR
APPROVAL OF THE CONSTRUCTION AND OPERATION OF THE GRAND COULEE DAM AND
RESERVOIR**

ORDER OF APPROVAL

15 December 1941

WHEREAS the Government of the United States, by application dated September 30, 1940, filed with the Commission through the Secretary of State under the provisions of Article IV of the Treaty of January 11, 1909, between the United States and Great Britain, requested the Commission to give consideration to such effects, if any, as the construction and operation of the Grand Coulee dam and reservoir, Columbia River, Washington, might have on levels or stages of the said Columbia River at and above the international boundary, and the consequences thereof, and to approve the Grand Coulee dam and the proposed method of operation of the reservoir to elevation 1290 feet above mean sea level; and

WHEREAS the Columbia River is a large international stream which rises in British Columbia on the western slope of the Rocky Mountains, and after flowing approximately 459 miles through British Columbia crosses the international boundary into the State of Washington; and after a further course of approximately 740 miles discharges into the Pacific Ocean near Astoria, Oregon; and

WHEREAS, after due notice to all interested parties in the United States and Canada, the said application came on for hearing in the City of Spokane in the State of Washington on February 28, 1941; and in the City of Trail in the Province of British Columbia on September 3, 1941; and in the said City of Spokane on September 6, 1941, when evidence was adduced by interested parties and all such parties desiring to be heard were fully heard; and

WHEREAS engineers of the United States Bureau of Reclamation have collected data and made studies as to the probable effects of the construction and operation of the Grand Coulee dam and reservoir upon water levels or stages of the Columbia River at and above the international boundary; and

WHEREAS the Dominion Water and Power Bureau of the Department of Mines and Resources of Canada and the Geological Survey of the Department of the Interior of the United States have jointly maintained international stream gauges and observation stations on the Columbia River and its main tributaries in Canada and the United States; and

WHEREAS the Engineer Advisers of the Commission and associated technical experts have made studies and prepared reports based upon the said data and studies of the Bureau of Reclamation and upon the records of the said international stream gauges and observation stations, which studies and reports tend to show that the construction and operation of the Grand Coulee dam and reservoir will have the following effects at and above the international boundary:

1. When the surface of the reservoir immediately above the Grand Coulee dam is at elevation 1290 feet above mean sea level and the flow of the river at the international boundaries is 20,000 second-feet, the backwater from the dam will have the effect of raising the natural water level at the boundary by approximately 2.5 feet, and as the flow at the boundary increases to 50,000 second-feet, the increase in water level at that point due to backwater will progressively decrease to approximately 1.0 feet; and there will be no appreciable or measurable increase in the natural water levels above Columbia Gardens, British Columbia, 4.5 miles from the international boundary, when the flow of the river at the boundary is less than 50,000 second feet;

2. When the surface of the reservoir immediately above the Grand Coulee dam is at elevation 1290 feet above mean sea level the increase in the natural water level at the international boundary due to

backwater will, according to the results of different computations, vary between approximately 1.0 feet when the flow is 50,000 second-feet at the boundary and zero when the flow is 400,000 second-feet.

3. The natural level of the Columbia River at Trail, British Columbia, 10.5 miles above the international boundary, will not be appreciably or measurably raised as the result of backwater from the Grand Coulee dam, under any conditions of flow or of reservoir operation up to said elevation 1290 feet at the dam;

4. When the flow of the Columbia River at the international boundary is greater than 400,000 second-feet, the natural levels of the river at and immediately above the boundary will be lower than would be the case if the Grand Coulee project had not been constructed, such lowering effects being due to the channel enlargement made by the Government of the United States at the Little Dalles, about 16 miles downstream from the international boundary, in connection with the construction of the Grand Coulee project.

The magnitude of changes in the natural levels of the Columbia River at the mouth of the Pend d'Oreille River, about one-half mile above the international boundary, resulting from the operation of the Grand Coulee dam and reservoir, will not differ appreciably from the corresponding changes in natural levels, whether raising or lowering, at the international boundary. At times of extreme low flow in the Columbia River when increases in natural water levels at and in the vicinity of the international boundary might be greatest, the natural water levels of the Pend d'Oreille River will not be affected for any considerable distance above its mouth due to a natural drop over the rock ledge at the mouth of that stream; and

WHEREAS at the hearing in the City of Trail statements were filed on behalf of the Government of British Columbia and the Corporation of the City of Trail asking that any approval by this commission of the construction and operation of the Grand Coulee dam and reservoir be made upon the following conditions:

1. That the Commission reserve jurisdiction to make a further order, or orders, with respect to the operation of the said dam and reservoir for the purpose of avoiding or minimizing any damage to property in British Columbia; and

2. That approval be given conditional on the applicant making suitable and adequate provision for the protection and indemnity of all interests in British Columbia that might possibly be damaged as a result of the raising of the natural water levels at and above the international boundary; and

WHEREAS official representatives of the Government of British Columbia, and Canadian nationals residing in British Columbia, appeared at the aforesaid public hearing and urged the Commission to safeguard Canadian interests in sport fisheries on the Columbia River; and

WHEREAS it was stated at said hearings on behalf of the Government of the United States and of the State of Washington that a same fish hatchery was being constructed on waters tributary to the reservoir for the sole purpose of propagating game fish to stock the reservoir; and

WHEREAS the said fish hatchery is being constructed by the United States Bureau of Reclamation, at the expense of the Government of the United States, and will be maintained and operated by the State of Washington under an agreement between the Bureau of Reclamation and the State, and competent State authorities have given assurance satisfactory to the Commission that young fish from the aforesaid hatchery will be distributed throughout the reservoir from the dam to the international boundary; and

WHEREAS it is essential that the international stream gauges and observation stations on the Columbia River and its main tributaries in Canada and the United States be maintained and operated with extraordinary care under competent supervision in order that the Commission may henceforth be supplied with accurate continuous records of the stages and discharges of the Columbia River at and in the vicinity of the international boundary.

NOW THEREFORE THIS COMMISSION DOETH ORDER AND DIRECT that the said Application of the Government of the United States be approved; and it is hereby approved, on the following conditions:

1. That the Applicant make suitable and adequate provision, to the satisfaction of the Commission, for the protection and indemnification of all interests in British Columbia by reason of damage resulting from the construction and operation of the Grand Coulee dam and reservoir.
2. That the Commission expressly reserves and safeguards its right under the aforesaid Treaty further to exercise jurisdiction over such effects on the natural levels or stages of the Columbia River at and above the international boundary as might actually result from the operation of the said Grand Coulee dam and reservoir, and to issue such further order or orders in the premises as the Commission may deem to be appropriate and justified for the protection and indemnification of the Province of British Columbia or any private or municipal corporation or citizen thereof that might be found by the Commission actually to have sustained damage on account of the raising of the natural levels of the Columbia River at and above the international boundary; Provided, that any such further order or orders shall be issued only after the Commission shall have received and considered formal applications filed by aggrieved parties in accordance with the Commission's Rules of Procedure.
3. That in the event the Province of British Columbia or any Canadian citizen, corporation or other interest duly authorized by the Province of British Columbia, shall hereafter construct a hydro-electric power plant on the Pend d'Oreille River in British Columbia, it is expressly provided that nothing in this Order shall be construed as limiting in any way the rights of the Province or of any such duly authorized citizen, corporation, or other interest, with respect to the securing of full and complete indemnification on account of possible curtailment of power output at such Pend d'Oreille River hydroelectric plant due to the raising of the natural levels of the Columbia River at the mouth of the Pend d'Oreille, caused by the construction and operation of the Grand Coulee dam and reservoir: Provided further, that upon the filing of an application with the Commission in accordance with its Rules of Procedure by the Province of British Columbia or any duly authorized citizen, corporation, or other interest thereof, either during the course of construction or after the completion of a hydroelectric plan on the Pend d'Oreille River, alleging damage from the aforementioned cause, the Commission shall make an immediate investigation of the application and of the proposed or completed construction, and determine such net effects on the power output as may properly be attributable to the raising and lowering of the natural levels of the Columbia River at and above the international boundary; and thereafter the Commission shall issue an appropriate order providing for full indemnification for any damage found to have been sustained, and such order shall have the same force and effect as if made at this time and incorporated in and made a part of this Order of Approval.
4. That in stocking the Grand Coulee reservoir with game fish the Commission considers it advisable that the United States Government or the State of Washington take appropriate steps to so release the young fish as to secure an equitable distribution thereof throughout the reservoir.
5. That the Commission appoint an engineering board to be known as the International Columbia River Board of Control, to consist of two members, one to be drawn from the engineering services of the United States and the other from the engineering services of Canada. It shall be the duty of the Board under the supervision of the Commission, to continue the studies initiated by the Engineer Advisers as to the effect of the operation of the Grand Coulee dam and reservoir upon water levels at and above the international boundary. For this purpose the United States Bureau of Reclamation, the United States Geological Survey and the Dominion Water and Power Bureau shall furnish the Board with such stream flow, water level and plant operation records as are required. The Board shall report to the Commission annually, and from time to time as may be required, and carry out such other duties as may be assigned to it by the Commission.

Dated at the City of New York this fifteenth day of December, 1941.

A. O. Stanley

Chas. Stewart

Roger B. McWhorter

J. E. Perrault