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## INTERNATIONAL JOINT COMMISSION

IN THE MATTER OF THE APPLICATION OF THE WEST KOOTENAY  
POWER AND LIGHT COMPANY, LIMITED, FOR PERMISSION  
TO CONSTRUCT AND OPERATE CERTAIN WORKS IN AND  
ADJACENT TO THE CHANNEL OF THE KOOTENAY RIVER IN  
THE PROVINCE OF BRITISH COLUMBIA, AND FOR THE  
RIGHT TO STORE WATER IN KOOTENAY LAKE IN THE SAID  
PROVINCE OF BRITISH COLUMBIA.

### ORDER OF APPROVAL

November 11, 1938

INTERNATIONAL JOINT COMMISSION

IN THE MATTER OF THE APPLICATION OF THE WEST KOOTENAY POWER AND LIGHT COMPANY, LIMITED, FOR PERMISSION TO CONSTRUCT AND OPERATE CERTAIN WORKS IN AND ADJACENT TO THE CHANNEL OF THE KOOTENAY RIVER IN THE PROVINCE OF BRITISH COLUMBIA, AND FOR THE RIGHT TO STORE WATER IN KOOTENAY LAKE IN THE SAID PROVINCE OF BRITISH COLUMBIA.

ORDER OF APPROVAL

In this Order whenever the word "Treaty" is used it shall mean and include the Treaty entered into between the United States of America and His Majesty the King of the United Kingdom of Great Britain and Ireland, and of the Dominions beyond the Seas, Emperor of India, dated the 11th day of January, 1909; whenever the word "Commission" is used it shall mean and include the International Joint Commission appointed under said Treaty; whenever the word "Applicant" is used it shall mean and include West Kootenay Power and Light Company, Limited; and whenever the words "Amended Application" are used, they shall mean and include the Amended Application of the Applicant dated the 8th day of February, 1932, and also the Applicant's Application dated the 7th day of September, 1938.

WHEREAS the Kootenay River is a river flowing across the international boundary between the United States and Canada, within the meaning of Article IV of said Treaty, and has its source in the Rocky Mountains in British Columbia, flows south to and across the international boundary into

the State of Montana, thence into the State of Idaho, thence north into Kootenay Lake in British Columbia, and thence by way of the West Arm of that Lake and the said river to its confluence with the Columbia; and

WHEREAS there are situated in the State of Idaho in the United States of America and in the Province of British Columbia in the Dominion of Canada large tracts of fertile land (commonly known as "the Kootenay Flats") bordering on and adjacent to the Kootenay river, which in a state of nature were incapable, and some of which are still incapable, of cultivation by reason of lack of drainage therefrom to the said river, and also by reason of the lands being overflowed from the river during periods of high water; and

WHEREAS certain citizens of both countries (hereinafter referred to as "Reclamation Farmers"), through the organization of drainage districts and otherwise have constructed dykes, dug drains and erected pumping plants for the purpose of reclaiming their lands and making them fit for cultivation; and

WHEREAS, notwithstanding the works referred to in the preceding paragraph hereof, in periods of high water said lands and the crops planted thereon are imperilled, and occasionally portions of the dykes have been washed away, and the crops on some of these lands totally destroyed, and the Reclamation Farmers affected have been compelled to rebuild their dykes, and have sustained serious damage and loss; and

WHEREAS the Applicant was at the times above referred to and still is the owner of or otherwise well and truly entitled to several water power sites on said Kootenay River in the Province of British Columbia below Kootenay Lake, hereinafter particularly referred to, at which the Applicant has erected large power plants at a cost of several millions of dollars, besides the plant known as the Corra Linn power plant, hereinafter particularly referred to; and

WHEREAS the Applicant did on the 16th day of September, 1929, present to and file with the Commission under the provisions of Article IV of the Treaty an application dated the 6th day of September, 1929, for permission to construct and operate certain permanent works in and adjacent to the channel of the Kootenay River at a place called Granite in the Province of British Columbia, for the development of storage on Kootenay Lake; and

WHEREAS this Application came on for hearing at the City of Bonners Ferry, in the State of Idaho, on the 6th and 7th days of November, 1929, after due notice to all parties interested in both countries of the filing of the Application and of the time and place of hearing; when evidence was adduced, and all parties desiring were heard; and at which hearing it was decided that additional time was necessary to enable interests located to the south of the international boundary to properly study the effect of the proposals of the Applicant; and

WHEREAS the Applicant pending disposal of the Application above referred to proceeded with the construction of a power development at a point on said river called Corra Linn, a site four miles downstream from the Granite site, and 87 miles north of the point at which the international boundary crosses the Kootenay River; and

WHEREAS the dam of the Corra Linn development is so designed as to permit its use both for storage and power purposes, and is capable of regulating the high waters of Kootenay Lake to the extent and in the manner in this Order hereinafter set forth, upon the removal of certain obstructions to the free flow of the waters of Kootenay River at a point thereon called Grohman Narrows, in British Columbia; and

WHEREAS the Applicant did at the same time enlarge the cross-sectional area of the river at constricted points in the channel from the dam upstream to a point above the rapids at Granite for the purpose of discharging the river flow without undue loss of head in the forebay; and

WHEREAS on the 15th day of February, 1932, while the above-mentioned Application was still pending, the Applicant did present to and file with the Commission, under the provisions of Article IV of the Treaty, a further Application and plans dated the 8th day of February, 1932, for the approval of works completed and proposed in connection with the Corra Linn development for the purpose of storing water in Kootenay Lake, by means of certain improvements to said river, at a point called Grohman

Narrows, and for the operation of said power and storage dam at Corra Linn, in the manner in this Order hereinafter more particularly set forth, which said Amended Application and plans superseded the Application and plans filed with the Commission on the 16th day of September, 1929; and

WHEREAS this Amended Application came on for hearing at the City of Nelson, in the Province of British Columbia, on the 24th day of August, 1933, and at the City of Ottawa, in the Province of Ontario, on the 2nd day of October, 1934, after due notice to all parties interested in both countries of the filing of the Amended Application, and of the time and place of hearings, when evidence was adduced, and all parties desiring were heard; and

WHEREAS objections were raised to the construction of these works and the operation of the dam as aforesaid, by certain Reclamation Farmers, and, at the said hearing held in the City of Ottawa on the 2nd day of October, 1934, the Applicant withdrew its Application; and

WHEREAS a number of Reclamation Farmers in both countries have recently petitioned the Applicant to revive its Application for permission to proceed with the construction of said works, in connection with the Corra Linn development; and

WHEREAS the Applicant, by instrument in writing bearing date the 7th of September, 1938, and filed in the offices of the Commission on the 13th day of September, 1938, did apply for leave to revive the Amended Application of the 8th February, 1932, in such manner that when revived it would

be in the same plight and condition as it was immediately preceding the time of withdrawal, with the exception that the Applicant's proposal, as set forth in Section 14 of the Amended Application, was amended by striking out the words "substantial amounts" in the fourth line of said section and substituting therefor the words "at least 250,000 cubic yards"; and

WHEREAS the Commission did grant to the Applicant leave to revive the Amended Application, and the Amended Application again came on for hearing in the City of Bonners Ferry, Idaho, on the 10th and 11th days of October, 1938, at the Town of Creston, British Columbia, on the 12th day of October, 1938, and at the City of Nelson, British Columbia, on the 13th day of October, 1938, after due notice to all parties in both countries of the revival of the Amended Application and of the times and places of hearing, when evidence was adduced and all parties desiring to be heard were heard; and

WHEREAS the Commission is of the opinion that the works in question, with the operation of the dam as hereinafter provided, should be of substantial and lasting benefit to the lands above referred to, and should tend to lessen the danger thereto of damage by flooding in high water periods in Kootenay River and on Kootenay Lake, but that certain additional cost for pumping and otherwise may be incurred by reason of the construction and operation of the said works; and

WHEREAS the Commission has deemed it right and proper that the Applicant should make provision for any cost for pumping and otherwise that may be incurred by reason of the construction and /or operation of said works to an amount not exceeding three thousand dollars (\$3000.00) in any one year, as in this Order hereinafter provided; and

WHEREAS the Commission acting under the authority conferred upon it by the Treaty, after reading the Amended Application, the statements and exhibits filed on behalf of the Applicant, the Government of Canada, the Government of the United States, and the Government of the State of Idaho, and the petitions presented by certain Reclamation Farmers in Idaho and British Columbia, and after having heard the evidence adduced and what was alleged by parties appearing before the Commission desiring to be heard, including Counsel or other representatives for the Applicant, the Government of Canada, the Government of the United States, the Government of the Province of British Columbia, the Government of the State of Idaho, and having considered the matter above referred to and all other matters, statements and documents brought to its attention, have determined that the works provided for in the said Amended Application and plans should be approved and authority given for the construction of the said works pursuant to the Treaty and subject to the conditions and regulations hereinafter particularly set forth.



## NOW THEREFORE THIS COMMISSION DOETH ORDER AND DIRECT:

1. That the Amended Application for permission to raise the level of the waters of Kootenay Lake for storage purposes, and the plans for such works, copies of all of which are filed in the offices of the Commission in Ottawa and Washington and made a part of this Order, be, and the same are hereby, approved, and the construction and operation of such works authorized, under the provisions of the Treaty, subject to the conditions and regulations hereinafter set forth.

2. That the said works shall be completed, and when completed shall be operated, in manner following:

- (1) That the Applicant shall proceed forthwith with the enlargement of the cross-sectional area of Grohman Narrows by removing therefrom at least 250,000 cubic yards of rock, gravel and boulders substantially in accordance with the design laid down on the Applicant's Plan No.F-271, dated July 27,1932, on file in the offices of the Commission in Ottawa and Washington, and in addition thereto shall remove at least 14,000 cubic yards of the rock bluff jutting into Grohman Narrows on the south side, and shall have at least one-half of all the said excavation completed not later than April 1,1939, and all of the said excavation completed not later than April 1,1940.

- (2) That during the low water period of 1938-39, the Applicant shall be limited to a maximum storage elevation of 1741.82 on the main lake (i.e., two and a half feet above zero of the Nelson gauge).
- (3) That following the completion of one-half of the proposed excavation, the Applicant in the low water period of 1939-40 shall be limited to a maximum storage elevation of 1743.32 on the main lake (i.e., four feet above zero of the Nelson gauge).
- (4) That following completion of all the excavation provided for in Sub-section (1) of Section 2 of this Order, the Applicant shall be permitted to store water in the main body of Kootenay Lake to a maximum elevation of 1745.32, Geodetic Survey of Canada datum, 1928 adjustment (i.e., six feet above zero of the Nelson gauge), in accordance with the rule curve detailed in Sub-section (5).
- (5) That after the high water of the spring and early summer flood and when the lake level at Nelson on its falling stage recedes to elevation 1743.32, Geodetic Survey of Canada datum, 1928 adjustment, the gates of the dam may be so operated as to retain it at said level until August 31st, and after said date the level of the main lake may be raised to elevation 1745.32, which shall be the maximum storage level until January 7, and thereafter it shall be lowered so that it shall not exceed

elevation 1744 on February 1, elevation 1742.4 on March 1, and elevation 1739.32 (i.e., zero of the Nelson gauge) on or about April 1, except under extraordinary natural high inflow conditions, when sufficient gates shall be opened and remain open throughout such period of excess so as to lower the level of the main body of Kootenay Lake to the storage level at that time obtaining as above defined.

- (6) That following the completion of all the excavation provided for in Sub-section (1) of Section 2 of this Order, and throughout the period of flood flow in each and every year, (i.e. from the commencement of the spring rise in March or April until the level of the lake at Nelson returns to elevation 1743.32, Geodetic Survey of Canada datum, 1928 adjustment, on the falling stage), a sufficient number of gates and sluiceways of the dam shall be opened to provide, in conjunction with the flow through the turbines, for the lowering of the main body of Kootenay Lake, as a result of the Applicant's completed and proposed excavation, by at least the amounts indicated in Table 2, page 21 of the Canadian Government Exhibit No.1, dated June 1, 1933, on file in the offices of the Commission in Ottawa and Washington as follows:

<u>Discharge from Kootenay Lake</u> <u>under original conditions</u> (in second feet)	<u>Amount of lowering to be</u> <u>effected on main body of</u> <u>Kootenay Lake (in feet)</u>
10,000	1.0
25,000	1.3
50,000	1.7
75,000	2.1
100,000	2.6
125,000	3.0
150,000	3.2
175,000	3.5
200,000	3.8
225,000	4.0

3. That the Applicant shall pay any cost incurred in the State of Idaho by reason of the construction and /or operation of said works, the amount of such payment not to exceed in the aggregate in any year the sum of three thousand dollars (\$3000.00) to be paid to the Treasurer of the State of Idaho or some authority designated by that State. The first payment of three thousand dollars (\$3000.00) shall be made on the 1st of January, 1940, and thereafter three thousand dollars (\$3000.00) on the first day of January in each and every year. Provided always that after the first or any payment has been made, the Applicant shall not be required to make any further payments until the Treasurer of the State of Idaho, or other designated Idaho authority, has produced vouchers for payment to claimants of the amounts required to cover the said cost, and has remitted the unexpended balance, if any, to the Applicant. Provided further that the Applicant shall not be entitled to dispute the validity of any vouchers produced as aforesaid.

4. That if the Applicant at any time after the said works have been in operation for one year and payment has been made by the Applicant as provided in the preceding paragraph hereof, represents to the Commission that pumping in drainage districts in the State of Idaho, caused by the construction and operation of said works, has been diminished or does not then exist, the Applicant may apply to the Commission for a reduction of the amount of the above-mentioned payment, or cancellation of the same entirely, and the Applicant shall be entitled to set up any matter it may see fit in support of its claim, including any matters that may have arisen subsequent to the date of this Order.

5. That in order to ensure the carrying out of the provisions of this Order, the Commission shall retain jurisdiction over the excavation at Grohman Narrows and the regulation of the levels of Kootenay Lake, through a joint board of engineers to be known as the International Kootenay Lake Board of Control (hereinafter referred to as the "Board of Control"), and to consist of one member of the engineering services of the Government of the United States and one member of the engineering services of the Government of Canada, to be appointed by the Commission. This Board of Control, under the direction of the Commission, shall be charged with the duty of securing compliance with the provisions of this Order insofar as they relate to the excavation at Grohman Narrows and the

regulation of the levels of Kootenay Lake; and in addition to the duties above and hereinafter particularly mentioned, it shall perform and discharge such other duties as may from time to time be assigned to it by the Commission. The Board of Control shall report to the Commission at such times as the Commission may determine. In the event of any disagreement between the members of the Board of Control the matter shall be referred by them to the Commission for decision. The Board of Control may at any time make representations to the Commission in regard to any matter affecting or arising out of the terms of this Order.

6. That the Applicant shall maintain and operate automatic gauges in a manner and at locations and of a type satisfactory to the Board of Control, as follows:

1. In Kootenay River at tailrace of Corra Linn power plant;
2. In Kootenay River at forebay of Corra Linn power plant;
3. In the West Arm of Kootenay Lake at Nelson;
4. On Kootenay Lake in vicinity of Queens Bay near lake outlet;

and that the records from these gauges shall be regularly made available to and filed with such authority as the Board of Control may direct.

That without limiting the generality of the foregoing, the Applicant shall make adequate provision to the satisfaction of the Board of Control for the determination of the flow of the river as provided in Sub-section (6) of Section 2 hereof; and shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Board

of Control, and shall make return of such records at such time and in such form as may be required by the said Board of Control.

7. That the Applicant shall make available to the Board of Control such data having to do with the discharge through the Corra Linn dam or power house or having to do with the power load, as the Board of Control may consider to be desirable or necessary to enable it to ensure the observance of the provisions of this Order.

8. That the cost of maintaining all parts of the dam and all sluices and log sluices and the above-mentioned automatic gauges shall be borne by the Applicant, and this work and maintenance shall be done in a manner satisfactory to the Board of Control.

9. That the regulation of the flow of water through the Corra Linn dam to the extent required under conditions of this Order, shall be subject to the supervision and control of the Board of Control under the direction of the Commission.

10. That the Commission, on the report of the Board of Control during the spring freshets, may determine that an emergency condition exists, and may then request the Applicant to co-operate with the Board of Control in regulating the flow of water through the said dam, to the end that the rights and interests of all parties may be protected so far as it is practicable so to do.

11. That the Applicant, without incurring any financial obligation

or responsibility, shall co-operate and assist in any measure that may be undertaken under the authority of the Governments of the United States and the Dominion of Canada, with a view to further channel enlargement designed to improve flood water conditions in Kootenay Flats, in the Province of British Columbia and in the State of Idaho.

Dated in the City of New York, this eleventh day of November, 1938, A.D.

*A. D. Stoney*  
*Chas Stewart*  
*John H. Bartlett*  
*W. H. Beach*  
*Eugene Fortson*  
*Geo. W. Kyte*