



Province of British Columbia Water Act

Order Water Act Section 88

File No. 76975-35/Falls

WHEREAS British Columbia Hydro and Power Authority (BC Hydro) is the operator of the Falls River Generating Station, in respect of which it holds Conditional Water Licences 120736 and 120739;

WHEREAS BC Hydro has engaged in public consultation to determine values for system parameters and to develop operating procedures that may provide benefits as described below;

WHEREAS the licensee has submitted the Falls River Project Water Use Plan, which recommends minimum and maximum flows, ramping rates and changes to the headpond operation at the Falls River Project which are intended to benefit fisheries and wildlife habitat;

WHEREAS I have accepted the Falls River Project Water Use Plan dated April 4, 2006; and

WHEREAS the Falls River Project Water Use Plan proposes a monitoring programme to determine whether the ordered parameters and procedures will provide the expected benefits;

I HEREBY ORDER THAT:

1. The licensee will provide the following minimum flows immediately downstream of the confluence of the tailrace and Big Falls Creek:
 - a) When the reservoir elevation is below 67.1 metres using the Geodetic Survey of Canada (GSC) datum [88.4 metres Local Datum]:
 - i) 1.3 cubic metres per second.
 - b) When the reservoir elevation is at or above 67.1 metres GSC:
 - i) 6.5 cubic metres per second from August 1 to October 15
 - ii) 2.6 cubic metres per second from October 16 to July 31.

2. Elevations at Big Falls Lake Reservoir shall be maintained as follows:

- a) at or above 70.7 metres GSC (92.0 metres Local Datum) between March 15 and May 1 and
- b) at or above 67.1 metres GSC during the rest of the year.

Should the reservoir elevation fall below 67.1 metres GSC at any time during the year, the licensee shall restrict generation discharge to achieve only the minimum flow release in 1(a) above. From March 15 to May 1, should the elevation decrease to between 67.1 metres GSC and 70.7 metres GSC the licensee shall restrict generation discharge to achieve only the minimum flow release in 1(b)(ii) above.

3. The licensee shall operate the Falls River Dam to:

- a) set the free spill elevation of the Falls River Dam to 71.1 metres GSC [92.4 Local Datum] between March 15 and May 1.
- b) set the free spill elevation to 69.0 metres GSC [90.3 metres Local Datum] between May 15 and February 15.
- c) for the periods May 2 to May 14 and February 16 to March 14, the free spill elevations may be between 69.0 metres GSC and 71.1 metres GSC.

4. For planned operations and planned outages, when generation discharge is between 1.3 and 6.5 cubic metres per second, the licensee shall implement the following ramping restrictions on the generation units:

- a) From February 15 to March 15, ramp up such that the turbine discharge changes at a maximum rate of 1.3 cubic metres per second over 10 minutes.
- b) From November 1 to April 15, ramp down such that the total project outflow changes at a maximum of 1.3 cubic metres per second flow change over 10 minutes.

5. The licensee shall submit a monitoring plan for acceptance by the Comptroller within six months of the date of this order, outlining monitoring details of the following:

- a) Presence and timing of steelhead and salmon in tailrace
- b) Fish spawning success in tailrace
- c) Tributary access and potential stranding in the reservoir
- d) Sedge grass habitat
- e) Tributary spawning in drawdown area of reservoir
- f) Wildlife habitat (nests and dens) in the reservoir drawdown zone

6. The licensee shall implement monitoring in accordance with the monitoring plan accepted by the Comptroller and shall report monitoring results to the Comptroller annually for the duration of the monitoring plan.
7. With respect to the maintenance and provision of records the licensee must:
 - a) Keep records of
 - i) Total project release from Falls River Dam and powerhouse into Big Fall Creek
 - ii) Reservoir elevations
 - iii) Generation discharge
 - iv) Free spill elevations
 - b) Provide a written report to the Comptroller of Water Rights on or before February 1 and August 1 of each year summarizing the records from the previous calendar year; and
 - c) Provide on request of the Comptroller of Water Rights records collected under 7a.
8. The licensee may operate the works in an alternate manner in the event of an emergency, dam safety requirement, or an extreme hydrological event.
9. All emergency operations or other deviations from operations ordered above shall be reported to the Comptroller of Water Rights in a timely manner.

Dated at Victoria, B.C., this 4th day of April, 2006.



Pieter J. Bekker
Deputy Comptroller of Water Rights



Province of British Columbia

Water Act

CONDITIONAL WATER LICENCE

British Columbia Hydro and Power Authority is hereby authorized to store water as follows:

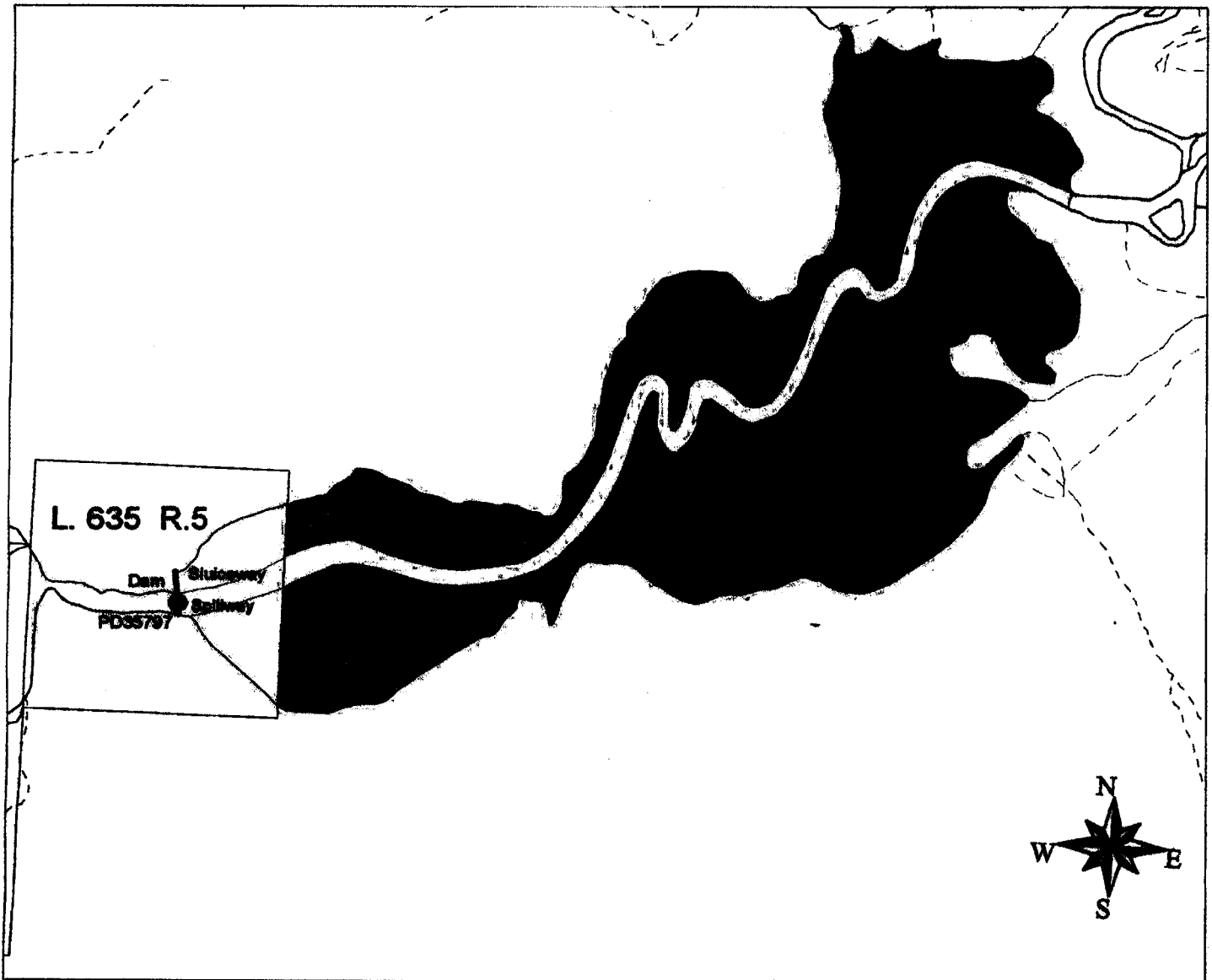
- a) The stream on which the rights are granted is Big Falls Creek and the reservoir is Big Falls Lake.
- b) The site of the dam, which forms the Big Falls Lake reservoir, is PD35797, located as shown on the attached plan.
- c) The date from which this licence shall have precedence is July 5, 1929.
- d) The purpose for which this licence is issued is storage to support the power purpose at the Falls River Generating Station, authorised under Conditional Water Licence 120736.
- e) Conditions for the storage of water in Big Falls Lake Reservoir are as follows:
 - 1. The water may be stored in the reservoir between the elevations of 64.2 metres, the minimum operating level for power generation, and 71.1 metres, the full supply level, measured at the dam using Geodetic Survey of Canada (GSC) datum.
 - 2. The volume of water authorized to be stored between the minimum operating level and the full supply level under this licence is estimated to be 11.5 million cubic metres.
 - 3. Surcharging the reservoir above the full supply level, drafting the reservoir to the full supply level and drafting the reservoir below the minimum operating level shall be done in accordance with the Operation, Maintenance, and Surveillance Manual.
- f) Water may be collected into storage, held in storage, and used throughout the whole year.
- g) This licence is appurtenant to the undertaking as set out in clause (g) of Conditional Water Licence 120736.

- h) The works authorised are a dam at the outlet of Big Falls Lake reservoir with spillway and sluiceway located as shown on the attached plan, and ancillary works.
- i) This licence is issued in substitution of Conditional Water Licence 10187.



Pieter J. Bekker
Deputy Comptroller of Water Rights

File: 0086192 Date Issued: *April 5, 2006* Conditional Licence 120739



WATER DISTRICT:
PRECINCT:
LAND DISTRICT:

PRINCE RUPERT
KITIMAT
RANGE 4, COAST

Signature:

T. Baller

Date:

April 5, 2006

LEGEND:

Scale:

1:20,000

Point of Diversion:



Map Number:

WR 103H.092

Permit over Crown Land:



C.L. 120739 for

C.L.

10187

File

0086192

PCL

25285