



Province of British Columbia

Water Act

CONDITIONAL WATER LICENCE

The holder of Crown land tenure covering the land to which this licence is appurtenant, is hereby authorized to divert and use water as follows:

- a) The stream on which the rights are granted is Big Silver Creek, tributary to Harrison Lake.
- b) The point of diversion denoted as PD76410 is on Big Silver Creek, at an elevation of 245.4 masl, and is located as shown on the attached plan.
- c) The date from which this licence shall have precedence is October 22, 2001.
- d) The purpose for which this licence is issued is Power (general), which is to be generated with the Big Silver Creek Generating Station.
- e) The maximum quantity of water which may be diverted and used under this licence is 42.0 cubic meters per second for Power (general), subject to the following:
 1. A minimum flow (i.e. In-stream Flow Requirements) of 1.9 cubic meters per second immediately downstream of the intake, must be maintained at all times;
 2. A minimum flow as ordered under clause (m) or (q) by the Regional Water Manager; and
 3. The minimum flows shall be measured at the works, immediately downstream of the point of diversion, and/or at a location as specified in the OPPR.
- f) The period of the year during which the water may be used is the whole year.
- g) The land upon which the water is to be used and to which this licence is appurtenant is the land on which the powerhouse of the Big Silver Creek Generating System is situated, described on Lands File 2408806.
- h) The works authorized for the Big Silver Creek Generating System are:
 1. Diversion structure and intake;
 2. Power tunnel and penstock;
 3. Access roads;
 4. Powerhouse, tailrace and switch yard; and
 5. Transmission line, a section of which shall be shared and jointly used with the

Tretheway Transmission Line
which shall be located approximately as shown on the attached plans.

- i) The construction of the said works shall be completed and the water shall be beneficially used prior to December 31, 2016. Thereafter, the licensee shall continue to make regular beneficial use of the water in the manner authorized herein.
- j) Before commencing construction of the works authorized under clause (h) of this licence, the licensee must to the satisfaction of the Engineer under the Water Act (the "Engineer") or the Regional Water Manager:
 - 1. Retain a Professional Engineer registered in the Province of British Columbia (the "Independent Engineer") who will provide services to the Engineer for the regulation of construction of the works;
 - 2. Retain a person with professional qualifications (the "Environmental Monitor") who will monitor environmental impacts during the construction of the works;
 - 3. Submit, the following:
 - a) plans that show the general arrangement of the works;
 - b) criteria for the design of the works;
 - c) criteria for the operation of the works;
 - d) a schedule for the construction of the works;
 - e) a Construction Environmental Management Plan (CEMP) for the management and mitigation of construction impacts;
 - f) an Interim Operational Environmental Management Plan (OEMP); and
 - g) terms of Reference for a Hydraulic Connectivity Study, describing the methodology to be used.
 - 4. Obtain Leave to Commence Construction (LCC) in writing from the Engineer.
- k) Before undertaking construction of any component of works for which the LCC is issued under (j) 4., the licensee must:
 - 1. Ensure that the design drawings for the works to be constructed are signed and sealed by a Professional Engineer registered in the Province of British Columbia (the "Design Engineer");
 - 2. Ensure that a Professional Engineer registered in the Province of British Columbia (the "Construction Engineer") supervises the construction of the works; and
 - 3. Obtain a letter from the Independent Engineer that the actual construction of that component work may proceed.
- l) Before commencing operation of the works authorized under Clause (h), the licensee must:
 - 1. Submit a report for acceptance by the Regional Water Manager on the operating parameters and procedures for the operation of the works;
 - 2. Submit and implement an Operational Environmental Monitoring Plan (OEMP), to the satisfaction of the Regional Water Manager;

3. Submit a draft Operation, Maintenance and Surveillance (OMS) Manual and Emergency Preparedness Plan (EPP) for acceptance by the Regional Water Manager.
 4. Submit the field verification report from the Hydraulic Connectivity Study for acceptance by the Regional Water Manager; and
 5. Obtain Leave to Commence Diversion and use of water authorized in this licence in writing from the Regional Water Manager.
- m) The diversion of water authorized under this licence may be restricted or prohibited at any time by an Order in writing of an Engineer under the Water Act or the Regional Water Manager, for the regulation of the diversion, rate of the diversion, and use of the water as may be required for the preservation of fish, wildlife, or navigation.
- n) The licensee must:
1. Design an OEMP to determine the nature of any impacts on fish and fish habitat, which includes data to allow for statistically supportable quantification of impact to baseline conditions over time to the satisfaction of the Regional Water Manager;
 2. Implement the program to the satisfaction of the Regional Water Manager;
 3. Continue the program for 5 years following the commencement of operation of the works or to the satisfaction of the Regional Water Manager;
 4. Submit annual reports summarizing the results of the monitoring program to the Regional Water Manager, within 30 days of March 31st;
 5. At the completion of the monitoring program, prepare a report that identifies the nature of any impacts on fish and wildlife and implement the appropriate mitigation and/or compensation to the satisfaction of the Regional Water Manager; and
 6. Based on the results of the annual monitoring of fish populations and other aquatic parameters, the Regional Water Manager may require the licensee to undertake the following:
 - a) Submit detailed analyses to evaluate changes to fish populations;
 - b) Conduct additional studies to evaluate the cause of the changes observed; or
 - c) Prepare and implement a mitigation plan to resolve specific situations.
- o) Submit to the Engineer, and as directed by the Engineer, within six months of receiving the leave to commence the diversion and use of water, the drawings of record that show the works as they were constructed.
- p) Within one year of operations, an Operation, Maintenance and Surveillance Plan and an Emergency Preparedness Plan must be submitted to the Dam Safety Officer, or to the Regional Water Manager.
- q) Based on the results of the Hydraulic Connectivity Study, the Regional Water Manager may require the licensee to:
1. Develop and execute a monitoring plan, in addition to those specified in the Operational Environmental Monitoring Program, specifically to evaluate the potential

- influence of connectivity changes on fish migration and invertebrate drift; and
2. Implement pulse flows if the magnitude and frequency of connectivity changes are predicted to result in adverse ecological effects (such as reduction in fish migration and invertebrate drift) greater than as predicted in the technical memorandum provided on this topic.
- r) The term of this licence is 40 years from the date of issuance of this licence.



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