Province of British Columbia
Water Act

CONDITIONAL WATER LICENCE

The holder(s) of a Crown land tenure covering the land to which this licence is appurtenant is/are hereby authorized to store, divert and use water as follows:

a) The streams on which the rights are granted are Trio Creek tributary to Harrison Lake, and Robert Henry Creek tributary to Trio Creek; and storage is in the head pond storage.

b) The points of diversion are Trio Creek denoted as PD79476 and PD186172 at elevation of 575 masl and 597 masl respectively, and Robert Henry Creek denoted as PD79478 at an elevation of 607 masl or so, and are located as shown on the attached plan.

c) The date from which this licence shall have precedence is October 12, 2005.

d) The purpose for which this licence is issued is power and the category for the power is general (commercial). The power is to be generated with the Trio Creek Generating Stations (Main and Slave).

e) The maximum quantity of water which may be diverted to fill the headpond reservoir is 675,000.00 cubic metres; and the maximum quantity of water which may be diverted and used for power generation is 6.00 cubic metres per second (re-diversion from Trio Creek main intake point with the individual maximum contribution of 6.30 cubic metres per second from the Trio Creek upper intake and 2.50 cubic metres per second from the Robert Henry Creek,) subject to the following:

1. On Trio Creek, a minimum flow of 0.30 cubic metres per second measured at the works or immediately downstream of the point of diversions separately
2. On Robert Henry Creek, a minimum flow of 0.090 cubic metres per second measured at the works or immediately downstream of the point of diversion;
3. On Trio Creek upstream of the fish barrier, located 1.20 kilometres upstream of Harrison Lake, a minimum flow as specified in Appendix A, or a minimum flow as ordered under clause (m) by the Regional Water Manager. The measurement of flow in real-time to confirm the minimum flow at that location is required when flows at that location are less than 0.50 to 1.50 cubic metres per second (following procedures specified in the OPPR, clause (l) (1).

f) The period of the year during which water may be diverted and 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 power houses of the Trio Creek Generation System are situated, described as that parcel or tract of land tenured under the Land Act, held under Lands File No. 2409027.

h) The works authorized for the Trio Creek Generating System are:
   1. Three diversion structures and screened intakes;
   2. Two penstocks;
   3. Dam;
   4. Access road; and
   5. Two powerhouses, tail races and a switch yard.

   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, 2018. 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 Leave to Commence Construction 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 the diversion or use of water for commissioning of the works, the licencee must:

1. Submit for acceptance by the Engineer a version of the Operating Parameters and Procedures Report (OPPR) for the operation of the works which allows for the proper functioning of the works;
2. Submit for acceptance by the Engineer and/or Dam Safety Officer of the Operating Parameters and Procedures for Dam operation along with other relevant information on safety aspect of the dam;
3. Submit for acceptance by the Engineer information on location of all gauges, monitoring methods and sampling frequencies, their stage-discharge curves;
4. Submit for acceptance by the Engineer all relevant information on compliance monitoring;
5. Provide other information as directed by the Engineer or the Regional Water Manager; and
6. Obtain a Leave to Commence Operations (Commissioning) from the Regional Water Manager.

m) Before commencing regular operations of the works authorized under Clause (h), the licensee must:

1. Submit a report for acceptance by the Engineer on the Operating Parameters and Procedures (OPPR) 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 the field verification report from the Hydraulic Connectivity Study, to the satisfaction of the Regional Water Manager;
4. Submit the results of the Ramping Study for acceptance to the satisfaction of the Regional Water Manager; and
5. Obtain a Leave to Commence Operations (LTCO) from the Regional Water Manager.

n) The licensee must operate the works authorized under clause (h) above in accordance with:

1. Procedures ordered by an Engineer under the Water Act, including any order for the regulation of the diversion, rate of diversion and use of water as may be required for the preservation of (Fish and or Wildlife) and for the provision of flow for whatever activities; and
2. Any amendment of the procedures ordered by an Engineer under the Water Act.

o) 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 (this could increase based on study outcome) 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 the date of precedence (October 12) specified in clause (c);
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;
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.
7. Design an operational monitoring of fish mitigation behavior in Trio Creek and potential modification of instream flow requirements (IFR) to mitigate any identified behavioral disruptions to the satisfaction of the Regional Water Manager.

p) 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 likely adverse ecological effects (such as reduction in fish migration and invertebrate drift) than as predicted in the Environmental Assessment and subsequent technical memoranda.

q) The drawings of record that show the works as they were constructed, must be stored and archived, and shall be provided for review when directed by the Regional Water Manager.

r) 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.

s) The term of this licence is forty (40) years from the date of issuance of this licence.

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