

Investigative Plan

Please describe the details of your project to the extent known. Consult the guidance document for further information on regulatory requirements, rationale for why the information is required, and how to find required information.

The scope and the timing for response will be provided. If information is requested and not received, it may result in the disallowance of the application.

Information on these topics may be required as part of the application processing and if further detail is necessary that is not part of the application and management plan received, you will be contacted and requested to provide additional information.

1.0 Background

1.1 Project Overview

Describe the potential project, including proposed work for the investigative stage and any phased development details:



Powell Hydro Inc. (PHI), a subsidiary of Alterra Power Corp. (AXY), is applying for an Investigative Use Licence (IUL) for Chusan Creek run-of-river hydroelectric facility (the Project). The proposed Chusan Creek facility is located upstream of the convergence of Chusan Creek with Toba Inlet, south of Julian Peak, approximately 100 km north of Powell River on the South Coast of BC.

The Project, should it move beyond the investigative phase, is planned to have an estimated capacity of 18.9 MW. Its components will include an intake, penstock/tunnel, powerhouse, and transmission line on a 1018.3 ha site.

1.2 Current Zoning / Land Use

Are there any management plans, zoning or use restrictions in place that limit or preclude your proposed use of the land?



☐ Yes ☒ No

1.3 Confirmation of Safety Plan

Your Project must meet the [Occupational Health and Safety \(OHS\) criteria](#) set out by WorkSafe BC. Does your Project meet these criteria?

☒ Yes ☐ No

1.4 First Nations Consultation

Describe any contact you may have had, including the name of the First Nation(s) and representatives contacted:



PHI discussed the proposed projects with Klahoose First Nation Chief James Delorme on January 27, 2016, and no objections were raised.

2.0 Location

2.1 Description

Provide a general description of the location of any proposed activities shown on the accompanying Detailed Site Map:



The general project location is identified in the attached Figure 1. The proposed locations of the water source and project infrastructure are identified on the attached Figure 9.

2.2 Location Justification

Provide your reasons/justification of the need for this type of project at this location:



The facility will provide electricity to BC Hydro via the Standing Offer Program. It is located in the vicinity of the existing East Toba, Montrose, and Jimmie Creek facilities operated by AXY subsidiaries, and will utilize existing Alterra transmission infrastructure to interconnect with the grid.

3.0 Infrastructure

3.1 Improvements

Describe any improvements to existing infrastructure, as well as any planned construction or installations:



No improvements to existing infrastructure or new construction is planned for the investigative phase. No vegetation clearing or land disturbance will result from the proposed activities.

3.2 Access

How are you planning to provide access to the site during the investigative phase?



The site will be accessed by helicopter during the investigative phase.

3.3 Water Use

Identify water requirements and sources for the Investigative Phase. Include any agreements outside of *Water Act* permits identified above, such as Municipal water supply.

No water requirements or sources are needed during the investigative phase. A hydrologic monitoring station to measure creek flows will be installed on the creek, but no additional permits will be required for this activity. The monitoring station will be non-invasive and will require only the installation of a pressure transducer and associated data logger. The monitoring station will be removed upon completion of the project.

4.0 Schedule

4.1 Investigative Schedule

Please complete the table showing what types of activities are proposed, which season(s) they will be conducted, the potential impacts of the activity and any mitigation or management of potential impacts. Please reference [reduced risk fish windows](#) as required by DFO:



Activity	Brief Description of Activity	Season	Potential Impact	Mitigation / management of potential impact
Hydrology	Installation and recurrent visits to a hydrologic monitoring station to measure creek flows.	summer	none. the gauge and logger installation will be temporary and not involve disturbance to the stream or land	N/A
Preliminary Engineering / Design	Assess penstock routing and intake and powerhouse locations	summer	none. the investigative engineering work will be observational with no disturbance to the stream or land	N/A
First Nations and stakeholder consultation	Share information collected during investigative phase and consult with the Klahoose First Nation	all	the FN could have concerns with the investigatory work	PHI will consult with the Klahoose at all stages of investigation and accommodate any concerns resulting

Add Field

5.0 Diligent Use

5.1 Evidence of On-going Diligent Use (For Replacements Only)

Review the investigative schedule information and table provided in your previously submitted Investigative Plan for this site, during the previous term of tenure. Provide a report on investigative work completed, incomplete or ongoing.



Activity	Brief Description of Activity	Status (e.g. Complete, incomplete, ongoing)	Comments / Milestones

Add Field

END OF FORM