

Templates for a Waterpower Project

July 2009

For A Waterpower Project On

(Indicate intended source of waterpower production)

Stage 1: Project Scope

1. PROJECT SCOPE (Stage 1)

1.1 Executive Summary

Summarize, in one page or less, the proposed waterpower project by including the following:

- The location of the planned development, in regard to: water source name, watershed, nearest settlements, road access;
- A description of the type of waterpower project, e.g. run-of-the-river, whether water storage will be required, anticipated size of the head pond;
- An indication of the planned maximum output of the facility and describe how transmission lines may be utilized;
- Indicate who the energy will be sold to, and whether an Energy Purchase Agreement has been secured or is negotiation;
- A description of measures to protect environmental values, such as required fish flows; and
- Whether there is any planned involvement with First Nations;

1.2 Proponent Information

This section should expand the information on the first page of the application form. The company name and incorporation number are to be provided along with a description of corporate structure in terms of the people who will be involved in the review of the project. Consultants that have been retained by the proponent to assist in the review should also be identified. The person who is to be contacted for any additional information and meetings must also be identified.

1.3 Project Concept and Description

The description of all the characteristics and location of each component of the project should complement the maps and plans in the submission of the application. Refer to the [Waterpower Project Application Checklist](#) for details on map and plan requirements. Ground and air photographs of the proposed sites are very helpful for understanding the project. Directions for assessing the site of each component are also to be provided.

The physical features of all land needed for each component of the project should be described. Include dimensions (in meters) and area (in hectares) of Crown land and any privately owned land that is required for every aspect of the project.

Include the land on which the works will be located and any corridors that will be required for access roads (detailed road building specifications will be required by the Ministry of Forests), transmission lines, etc.

The status of active and inactive roads to be used to access the components of the project should be described. Indicate the extent of any construction required to upgrade existing roads. Describe the new roads to be constructed. Trails in the vicinity of the project should also be indicated.

Describe the route of the transmission line from the switchyard to the provincial grid or place of use if the power is to be used by the proponent or a person that is not a utility. If the connection of the transmission line is to the provincial grid, indicate if a substation will need to be constructed or upgraded.

1.3.1 Capacity of the Project

Indicate the arrangement of turbines and generators and the maximum power capacity of each unit. The maximum quantity of water to be diverted by the units should be described. An estimate of the maximum and average annual generation of electricity, and monthly distribution of average annual generation of electricity should also be provided.

1.3.2 Watershed Characteristics and Availability of Water

Briefly describe the characteristics of the watershed that will contribute flow to the project. Describe the availability of water for use by the project, including a preliminary monthly hydrograph and monthly power production estimate.

The extent of the investigation and quantity of data on which the project is based should also be described. For example, is the availability of water based on long-term records on the stream, or a cursory analysis of a few years of stream flow measurements on a nearby stream? Detailed data will be required for the submission of the Development Plan at Stage 4 of the development cycle.

Also indicate and describe whether the waterpower project will require water storage. For example, will water be impounded behind a structure (e.g. dam or weir)? Refer [to Schedule 2 Water Licence and Dam and Reservoir Information](#).

1.3.3 Parameters for the Operation of Works

Describe the general arrangement of works and include all those components needed to generate electricity and convey it to the user. Indicate whether [Joint Water Use Agreements](#) will be required with other water licence holders.

1.4 Linkages with other Projects and Roads

Describe any components that the project has in common with other projects e.g. access roads, transmission lines or corridor, substation for connection to the provincial grid, etc. For example, is a cluster of waterpower projects developing in the watershed of your proposed development? Are existing works planned to be utilized or improved (e.g. logging roads or bridges).

1.5 Market for Electricity

The proposed market for the electricity should be described, e.g. for sale to BC Hydro, for use by the owner in the extraction or processing of natural resources, for export, for distribution to the end users, etc.

This information will help determine the category of power use for fees and rentals and the interests of other agencies, such as the British Columbia Utilities Commission. The proponent should indicate whether an Energy Purchase Agreement (and EPA) is under negotiation, and the stage of those negotiations.

1.6 Schedule for Completion of Project

A schedule for the review and construction of the project must be provided. This schedule is the proponent's estimate of the time to complete the following processing steps required by Water Stewardship Division (WSD) or the Ministry of Environment:

- Design and Construction timelines;
- Ordering of materials;
- Preparation and submission of the Development Plan;
- Review of the Development Plan by WSD;
- Preparation of Project Report by WSD;
- A Decision on the Water Licence Application by WSD and ILMB;
- Authorization for the Construction of Works; and
- Monitoring of environmental values e.g. maintaining fish flows.

This estimate should also include time for obtaining other permits and approvals for the construction of the project.

1.7 First Nations Involvement

Indicate whether there are First Nations Bands in the general area of the proposed project. Describe if there are any current or planned communications with First Nations.

1.8 Fish and Wildlife Information

Identify any assessment studies which may be required to for fish, wildlife or aquatic habitat preservation. Provide any base water flows that will need to be maintained.

1.9 Land Access

Describe how access to the project area will be obtained. Please indicate whether Crown land and or private land will be involved.