

RFP APPENDIX #5

**FUEL PLAN REQUIREMENTS**

1. **PURPOSE**

These are recommended instructions for the completion of a proposed fuel plan with respect to the Project (the “Fuel Plan”), which each Proponent should submit as part of its Proposal.

The Fuel Plan should demonstrate that the Proponent has contracted for, or is reasonably assured of, the supply or availability, and if applicable the transport and storage, of Forest-based Biomass required for the operation of its Project in accordance with the terms of its Proposal for a minimum of the first 5 years of the Term under the EPA.

Note that BC Hydro reserves the right to require further information regarding a Proponent’s historical and planned Forest-based Biomass and Auxiliary Fuel supply, including sourcing, pricing, fibre flow/utilization and thermal/energy balances relative the Project and other facilities in British Columbia owned or operated by the Proponent or its Affiliates.

2. **GENERAL INSTRUCTIONS**

- 2.1 The Fuel Plan should be organized to follow the numbering system and the headings set out in these Instructions. If a particular heading is inapplicable, retain the number and heading and insert “Not applicable”.
- 2.2 If an Instruction calls for the submission of applications, reports, agreements, plans, schedules, resumes, studies or other documents, those documents should be referenced in the text as an Exhibit. Exhibits should be numbered sequentially and tabbed at the end of the Fuel Plan.
- 2.3 The Fuel Plan should include a Table of Contents with page numbering references, following the numbering system and headings in these instructions, and including a listing of Exhibits.
- 2.4 A Proponent should be fully responsive to each Instruction, as applicable to the Proponent and its Project. If a Proponent is in any doubt as to the requirements contained in these Instructions, it should seek clarification using the Q&A process.
- 2.5 For the purposes of this RFP, BC Hydro has identified three fuel categories (each a “Fuel Category”):
- (a) “Category A”, being mill solid wood residues (hog fuel, sawdust, chips and/or chunks) and pulp mill residues (hog fuel and black liquor);
  - (b) “Category B”, being roadside and landing residues; and
  - (c) “Category C”, being biomass derived from standing timber.
- 2.6 If the Proponent is unable to provide any of the information requested, it should include a brief explanation of the reasons.

3. **FUEL PLAN INSTRUCTIONS**

3.1 **Forest-based Biomass Volume:** Complete, and insert as a separate Exhibit, the table attached as Schedule A to this Appendix 5 in accordance with the following instructions:

(a) **Incremental Generation:** if the Proponent is proposing to provide incremental generation from an existing facility (i.e., whether the Proponent is an IPP or a Customer):

(i) **Historical and 5-year Planned Generation:** in sub-column “X” of each of the columns titled “Category A”, “Category B” and “Category C”, insert the approximate volume (in metric tonnes) of Category A, B and C Forest-based Biomass (as applicable):

(A) **Historical Forest-based Biomass Consumption:** that has been consumed in energy (steam/electricity) generation at the facility in calendar years 2005 through 2007 inclusive; and

(B) **Minimum 5-Year Plan:** that is expected to be consumed in energy (steam/electricity) generation up to the Customer’s GBL, or up to the IPP’s existing annual generation at the facility at which energy will be delivered under the EPA in each of not less than the first 5 years of the Term under the EPA; and

(ii) **Minimum 5-Year Plan For Incremental Energy:** in sub-column “Y” of each of the columns titled “Category A”, “Category B” and “Category C”, insert the approximate volume (in metric tonnes) of Category A, B and C Forest-based Biomass (as applicable), that is expected to be consumed in energy (steam/electricity) generation in excess of the Customer’s GBL, or in excess of the IPP’s existing annual generation, at the facility at which energy will be delivered under the EPA in each of not less than the first 5 years of the Term under the EPA.

(b) **New generation:** if the Proponent is proposing to provide a new (i.e., “greenfield”, non-incremental) generation Project, in sub-column “Y” of each of the columns titled “Category A”, “Category B” and “Category C”, insert the approximate volume (in metric tonnes) of Category A, B and C Forest-based Biomass (as applicable), that is expected to be consumed in energy (steam/electricity) generation at the facility at which energy will be delivered under the EPA in each of not less than the first 5 years of the Term under the EPA.

3.2 **Fuel Allocation:** Complete, and insert as a separate Exhibit, the table attached as Schedule B to this Appendix 5 in accordance with the following instructions:

(a) In the column titled “Biomass Fuel”:

(i) **Historical:** if the Proponent is proposing to provide incremental generation from an existing facility (i.e., whether the Proponent is an IPP or a Customer), insert the approximate aggregate quantity of Forest-based Biomass, expressed in GJs, that was utilized in energy generation in calendar years 2005 through 2007 inclusive; and

- (ii) Minimum 5-year plan: whether the Proponent is proposing to provide incremental or new generation, insert the approximate aggregate quantity of Forest-based Biomass, expressed in GJs, that is expected to be consumed in energy (steam/electricity) generation at the facility at which energy will be delivered under the EPA in each of not less than the first 5 years of the Term under the EPA.
- (b) In the column titled “Auxiliary Fuel”:
  - (i) Historical: if the Proponent is proposing to provide incremental generation from an existing facility (i.e., whether the Proponent is an IPP or a customer), insert the approximate aggregate quantity of Auxiliary Fuel, expressed in GJs, that was utilized in energy generation at the facility in calendar years 2005 through 2007 inclusive; and
  - (ii) Minimum 5-Year Plan: whether the Proponent is proposing to provide incremental or new generation, insert the approximate aggregate quantity of Auxiliary Fuel, expressed in GJs, that is expected to be consumed in energy (steam/electricity) generation at the facility at which energy will be delivered under the EPA in each of not less than the first 5 years of the Term under the EPA.

3.3 Fuel Sourcing Strategies: In a separate Exhibit provide the following information regarding arrangements or strategies that the Proponent has made, or proposes to make, to procure Forest-based Biomass for the Project during a period of not less than the first 5 years of the Term:

- (a) Self-Sourced Fuel: For Forest-based Biomass expected to be used in the Project that the Proponent will be self-sourcing, identify the anticipated original geographic source and delivered costs of such Forest-based Biomass (divided by Category A, B and C) in each calendar year of not less than the first 5 years of the Term of the EPA. This information should include Crown versus private fibre supplies and the approximate geographic location of stands or residues (e.g., Forest District, supply block, Tree Farm License, Forest License, Non Replaceable Forest Licenses, etc.).
- (b) Third Party Sourced Fuel: For Forest-based Biomass expected to be used in the Project that the Proponent will not be self-sourcing:
  - (i) provide copies of all executed letters of intent, preliminary commitments and executed final agreements between the Proponent and existing Forest-based Biomass suppliers for the supply of Forest-based Biomass to the Proponent pertaining to not less than the first 5 years of the Term under the EPA; and
  - (ii) provide an estimate of the delivered fuel cost of each Fuel Category of Forest-based Biomass expected to be used in the Project in each of not less than the first 5 years of the Term under the EPA.
- (c) Alternative Supplies: Describe viable alternate biomass fuel supplies that the Proponent intends to access should the Proponent’s contracted Forest-based Biomass suppliers fail to perform during the term of the EPA pertaining to not less than the first 5 years of the Term under the EPA.

- 3.4 Fuel Delivery Arrangements: In a separate Exhibit, describe all arrangements or strategies that the Proponent has made to deliver the Forest-based Biomass required for the Project from identified suppliers to the Project site during a period of not less than the first 5 years of the term of the EPA. Include discussion regarding load-out facilities, and current and projected average haul distances to the Project.
- 3.5 Impact on Tenure Holders: If Category B and/or Category C Forest-based Biomass is required in support of the Proposal, in a separate Exhibit describe how the Proponent's acquisition of such Forest-based Biomass will be integrated with the operational plans of other forest tenure holders.
- 3.6 Regulatory Compliance: If Category B and/or Category C Forest-based Biomass is required in support of the Proposal, in a separate Exhibit describe how, in relation to the accumulation and utilization of such Forest-based Biomass, the Proponent will operate under the existing regulatory frameworks established by the Ministries of Environment, and Forests and Range, and within the municipalities in which the Proponent operates.

**SCHEDULE A<sup>1</sup>**

**Biomass Fuel Volumes**

Calendar Year	Category A (Metric Tonnes)		Category B (Metric Tonnes)		Category C (Metric Tonnes)	
	X	Y	X	Y	X	Y
2005		NA		NA		NA
2006		NA		NA		NA
2007		NA		NA		NA
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						
2023						
2024						
2025						
2026						
2027						
2028						
2029						
2030						
2031						
2032						
2033						

<sup>1</sup>**Note to Proponents:** Schedule A is also posted in Excel format on BC Hydro's website at [www.bchydro.com/bioenergycall](http://www.bchydro.com/bioenergycall). Proponents should complete the Excel version of Schedule A as part of the Fuel Plan.

**SCHEDULE B<sup>2</sup>**

**Fuel Allocation**

Calendar Year	Biomass Fuel (GJs)	Auxiliary Fuel (GJs)
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		
2023		
2024		
2025		
2026		
2027		
2028		
2029		
2030		
2031		
2032		
2033		

<sup>2</sup>**Note to Proponents:** Schedule B is also posted in Excel format on BC Hydro's website at [www.bchydro.com/bioenergycall](http://www.bchydro.com/bioenergycall). Proponents should complete the Excel version of Schedule A as part of the Fuel Plan.