



BC Hydro's Bioenergy Call

Kamloops, BC
February 20, 2008

Today's Agenda

for generations



- Background Jim Scouras
- Bioenergy Call Overview Jim Scouras
- Bioenergy Call RFP James Grant
Lester Dyck
- Questions Panel

Reliable power, at low cost, for generations. Reliable power, at low cost, for generations. Reliable power, at low cost, for generations. Reliable power, at low cost, for generations.

Important Reminder

- Today's presentations are of a general nature and are being given for the benefit of all persons that are interested in BC Hydro's Bioenergy Call.
- Attendees are reminded of the following:
 - An RFP has now been issued in respect of Phase I of the Bioenergy Call. The Phase I RFP (including the RFP process) will not be modified by any information provided during today's session. Any changes to the RFP will be implemented by way of addenda (issued as described in the RFP document).
 - Today's meeting is not a meeting of Proponents. A formal Proponent's Information Session on the Phase I RFP has been scheduled for March 26, 2008.
 - Attendees should note that there is a Q&A protocol under the Phase I RFP. Attendees that elect to register as Proponents should submit any questions they may have regarding the Phase I RFP process and related matters to the RFP Administrator (as described in the RFP document).

Background - BC Hydro IPP Opportunities

	ENERGY & ASSOCIATED CAPACITY		ENERGY	REMOTE COMMUNITY ELECTRIFICATION (RCE)	NON-INTEGRATED AREA (NIA) DIESEL DISPLACEMENT
Objective	Fill the emerging electricity gap by purchasing power from larger projects that meet the clean definition	Fill the emerging electricity gap by purchasing power from projects that utilize sawmill residues, logging debris and beetle-killed timber as a fuel source	Purchase power from small, clean-energy generators (no more than 10 MW)	Encourage development of currently non-commercial new technology for future use in non-integrated areas	Reduce or eliminate the use of diesel generation for power production in NIA through the use of renewable energy
Call Process	Competitive process	Competitive process	Set price based on last call results	RFEOI	Competitive process
Current Opportunities	Clean Power Call	Bioenergy Call	Standing Offer Program	Emerging Alternative Energy	Location Specific (NIA)
Target Size	Larger projects	All projects	Small projects 10 MW or less	Small projects < 100 kW	Small projects < 10 MW
Technology	Proven	Proven	Proven	Emerging	Proven
Contact	Martin Kincade 604-623-3582	Jim Scouras 604-623-3860	Laura Creech 604-623-3535	John Oliver 604-528-1988	Pun Chu 604-528-1416

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Background - Regulatory Considerations

As a regulated utility, BC Hydro must file various applications with the BCUC:

- Integrated Electricity Plan (20 year plan)
- Long Term Acquisition Plan (10 year plan)
- Electricity Purchase Agreements (EPAs)
- Revenue Requirements Application

In order to advance the calls BC Hydro is required to seek BCUC's acceptance on:

- Cost effectiveness of EPAs awarded (Section 71 application)



Background - Bioenergy Call Chronology

- February 27, 2007 BC Energy Plan – “A Vision for Clean Energy Leadership” issued by Government and BC Hydro directed to issue Bioenergy call
- March 9, 2007 – BC Hydro launched the Bioenergy Call Request for Expressions of Interest and received over 80 submissions
- April 3, 2007 – BC Hydro, MoFR and MEMPR jointly hosted an information session in Prince George
- June 25, 2007 – Special Direction 10 issued by the Government providing further direction to BC Hydro and BCUC about the Bioenergy Call
- Fall 2007 – Continued engagement and dialogue with First Nations and stakeholders
- January 31, 2008 – Bioenergy Strategy issued by Government outlining the Bioenergy Call will occur in two phases
- February 6, 2008 – BC Hydro issues Bioenergy Call Request for Proposals

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Background - RFEOI

- In March 2007 BC Hydro released a Request for Expressions of Interest (RFEOI) to identify potential projects and obtain input
- More than 80 responses and significant input
- New relationships across forestry and energy sectors
- BC Hydro consulted with key stakeholders, including forestry companies and industry associations, First Nations, and Independent Power Producers



Background - Opportunities

- Significant opportunity for generating power over mid-term (10 - 15 years)
 - utilization of mountain pine beetle impacted trees
 - utilization of other waste wood (e.g. wood currently used in beehive burners)
 - local community support
- Bioenergy represents clean, capacity rich electricity that can help BC Hydro close supply gap
- Significant level of interest from a broad spectrum of potential bidders
 - existing forest companies
 - existing IPPs
 - First Nations
 - new IPPs
- Potential opportunities for new technologies
- Link call process and contract with forest tenure/licensing

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Background - Challenges

- Difficult to project fuel availability over longer-term (>15 years)
 - site dependant
 - forest market dependant
- Fuel make-up and cost will likely change over time
- Currently no economic incentive to bring waste wood out of forest
- Existing forest tenures do not match duration of a power contract
- There are currently no “back-stop” tenures for a project even if a tenure holders stops harvesting/operating in that area
- Bidders require sufficient time to ready proposals - which may take longer than some communities would like
- Existing users are very concerned about potential impacts on residual wood material

Bioenergy Call Overview - Policy Direction



The BC Energy Plan
A Vision for Clean Energy Leadership

- Directed by Energy Plan Policy Action #31
- Competitive call utilizing sawmill residues, logging debris and mountain pine beetle infested timber
- Encourage greater development and use of “home-grown” wood-fired electricity in the province
- Help address the mountain pine beetle situation and capture value from the affected timber
- Call will occur in two phases

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Bioenergy Call Overview - Design Goals



- Meet policy direction from Government
- Acquire cost-effective bioenergy to help close the supply gap
- Target sawmill residues, logging debris and beetle-killed timber
- Seek broad First Nations and stakeholder input on call design process
- Reduce project attrition and ensure projects' success

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Bioenergy Call Overview - Phased Approach

Bioenergy Call - Phase I

A Request for Proposals (RFP) focusing on projects that are viable now and do not require new tenure from MoFR

- RFP was issued February 6, 2008
- Plan to have EPAs signed by fall 2008

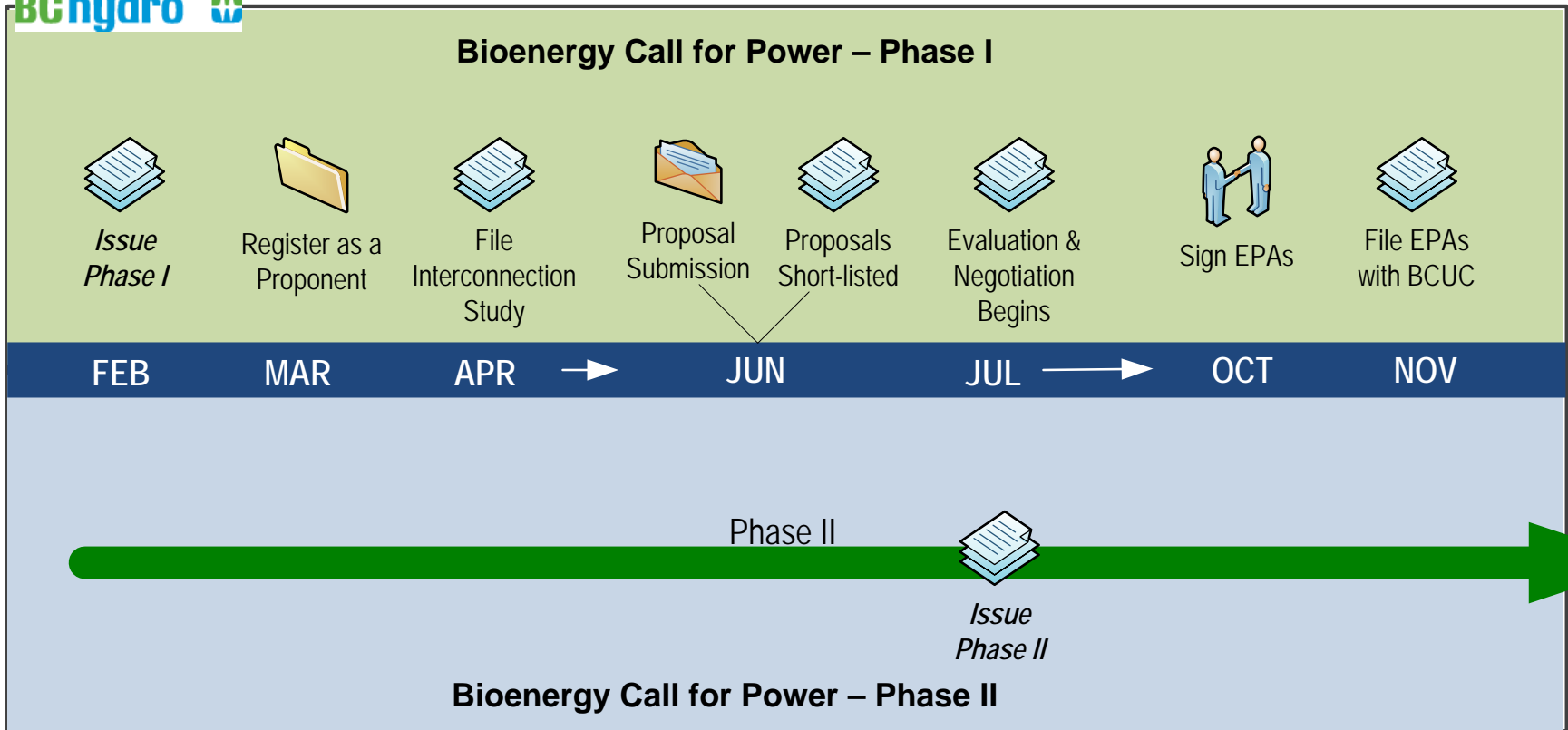
Bioenergy Call - Phase II

A call for projects that are not viable now and require elements that will be informed by a biomass inventory/forest tenure analysis being completed by MoFR

- Launched by July 2008 after inventory and forest tenure analysis is complete

 Both Phases are required for Bioenergy Call to meet policy direction and design goals

Bioenergy Call Overview - Joint Timeline



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Bioenergy Call RFP - Phase I



■ Key aspects of Phase I of the Bioenergy Call

- Timing
- Request for Proposals
- Eligibility
- Evaluation
- General Terms and Conditions
- Generation Base Line

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Bioenergy Call RFP - Timing

- RFP Issued February 6
- EPA Term Sheets Issued February 29
- Registration March 7
- RFP Information Session March 26
- Issue Draft EPA May 2
- Proposal Submission June 3
- Short Listing June 27
- Negotiation, Evaluation & EPA Signing Phase July 2 – October 15



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Bioenergy Call - Request for Proposals (RFP)

- More flexible approach in recognition of the unique nature of projects and related fuel supply
- No contractual or other binding relationship between BC Hydro and the proponent until contracts signed
- There are three mandatory elements in the RFP
 - proponents must register
 - proponents must meet the stipulated interconnection deadlines
 - proponents submissions must be on time
- BC Hydro intends to conduct negotiations with a small number of proponents and sign contracts by fall 2008

Bioenergy Call RFP - Eligibility

- Fuel type – forest based biomass
 - Mill solid wood residues
 - Pulp mill residues
 - Roadside residues
 - Biomass from standing timber
- Location – project to be located in BC
- Technology – proven generation technologies
- Clean – entire output must qualify as clean energy in accordance with guidelines to be published by MEMPR
- Project Type
 - New generation projects
 - New self-generation or incremental self-generation

Bioenergy Call RFP - Eligibility (cont'd)

- Metering – must be capable of being metered separately
- Point of Interconnection – project must have a point of interconnection on the System
- Interconnection Study Agreement – to be filed with the required deposit by the date in the RFP schedule
- Existing Contracts
 - none of the proposed supply can be contracted to BC Hydro unless the contract can be lawfully terminated by the proponent shortly after the call is issued
 - None of the capacity or energy from the Project under a contract to any other party is eligible, except for contracts that can be lawfully terminated by the Proponent prior to the Guaranteed COD

Bioenergy Call RFP - Evaluation

Potential Evaluation Criteria

- BC Hydro's assessment of fuel availability
- Increased utilization of existing wood residuals
- Minimizing adverse impacts on existing uses of forest based biomass
- Interconnection, transmission and generation impacts
- First Nations engagement activities
- Risk assessment
- Compliance with the RFP terms and variations from the terms and conditions
- BC Hydro load/resource balance
- Environmental impacts/benefits
- Beneficial impacts of generation technology and/or regional diversity
- Cost effectiveness of comparable non-RFP alternate resources
- Proponents opportunity cost relative to the project
- Hourly firm energy profile
- Other public interest criteria

Bioenergy Call RFP - Terms & Conditions

Some Highlighted Terms and Conditions

- Privilege – BC Hydro may not award any EPAs or may terminate the process at any time
- Negotiation – BC Hydro may negotiate prices and any other terms and conditions with any proponent
- Liability Exclusion – BC Hydro incurs no liability related to this RFP
- Confidentiality – BC Hydro shall endeavor to keep confidential information provided by proponents other than information that enters the public domain; government, BC Hydro directors or officers, regulatory proceedings or Freedom of Information Act.
- Collusion – Proponents warrants that their proposal has been prepared without collusion with any other proponent
- Lobbying – Proponent to direct all communication to BC Hydro in accordance with section 5 of the RFP
- Publication – BC Hydro may publicize any results of the RFP process, provided BC Hydro does not attribute results to specific Proponents

Bioenergy Call RFP - Next Steps

February 29th

- EPA Term Sheets issued
- Deadline for submission of Distribution voltage interconnection applications to BC Hydro

March 7th

- Registration and Submission of GBL data to BC Hydro
- Deadline for submission of Transmission voltage interconnection applications to BCTC

March 26th

- Information session for proponents

March 31st

- Filing of Preliminary Interconnection Study agreements with BC Hydro for Distribution System-connected Projects

April 7

- Filing of Feasibility Interconnection Study agreements with BCTC for Transmission System-connected Projects

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Bioenergy Call RFP - Customer GBL

Generation Base Line

- The purpose of the GBL is to define incremental generator output that can be considered for a prospective energy sale
- Each customer, including all customer owned and operated generators behind the point of interconnection will need to have GBL set for their project
- For transmission voltage connected customers with multiple generators a GBL will need to be set for all generators
- The initial customers' "estimated GBLs" should reflect a 365 day annual period
- The GBL start point is the same as the CBL establishment year
- The GBL may then need to be adjusted for unique customer circumstances (existing LD contracts, EPAs, market sales, 1880/adhoc purchases etc.)

How to Get Involved...

Power Acquisition's website:

www.bchydro.com/ipp

Bioenergy Call website

www.bchydro.com/bioenergycall

Or email us at:

bioenergy.call@bchydro.com



QUESTIONS?

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