

Clean Power Call

Proponent RFP Information Session
Thursday, October 23, 2008

BChydro 



Clean Power Call Introduction

**Richard Marchant
Power Acquisitions**

- Session is intended to assist Proponents in preparing high quality Proposals – it is not intended to discuss Call design or policy issues
- Session is not intended to replace a thorough reading & understanding of the RFP documents
 - The RFP will not be modified by any information provided during today's session
- Desired outcome is that Proposal be in a form that:
 - can be accepted by BC Hydro with no modification
 - facilitates evaluation
- There will be time for questions prior to each break

Today's Agenda

Time	Topic	
8:00 – 8:30	Registration & Coffee	
8:30 – 8:45	Welcome & Introduction	<i>Richard Marchant</i>
8:45 – 9:00	Proposal Preparation	<i>Andrea Loewie</i>
9:00 – 9:30	Project Description & Energy Source Data Overview	<i>James Grant</i>
9:30 – 10:00	Questions	<i>Panel</i>
10:00 – 10:15	Break	
10:15 – 10:45	Commercial Proposal Overview	<i>Bill Peterson</i>
10:45 – 11:15	Specimen EPA & Calculation Overview	<i>Judy Baum</i>
11:15 – 11:30	Post-Proposal Process	<i>Andrea Loewie</i>
11:30 – 12:00	Questions	<i>Panel</i>
12:00 – 12:15	Break	
12:15 – 1:00	Optional – Computational Model Demo	<i>Judy Baum/Bill Peterson</i>

- The Clean Power Call is an RFP process, allowing greater flexibility
 - Eligibility criteria are fixed
 - Specimen EPA represents BC Hydro's preferred terms & conditions
- Variations to the Specimen EPA will be considered
 - Should represent changes that are “essential” to your Project, or
 - Should represent potential value to BC Hydro
 - There are a limited number of key EPA provisions for which BC Hydro will not consider “essential” variations and may disqualify a Proposal
- BC Hydro has reserved the right to conduct discussions with Proponents
 - Discussions will be focused and are constrained by the RFP schedule
 - Proponents should not assume discussions will occur

BC Hydro's intent is to conduct a fair procurement process

- Collusion between or among Proponents is strictly prohibited
- Proponents should not lobby BC Hydro directors, officers or employees, or government to influence outcome of the RFP process
- Proponents should respect terms of the Confidentiality and Compliance Agreement and refrain from unauthorized disclosures relative to any post-Proposal discussions that may occur
- Distribution of Proponent information within BC Hydro will be controlled



Proposal Preparation

Andrea Loewie

- BC Hydro expects a large number of Proposals
- Make every effort to comply with RFP requirements and Proposal submission directions and submit a complete, clear Proposal – see RFP documents & checklist

• Do not miss key dates:

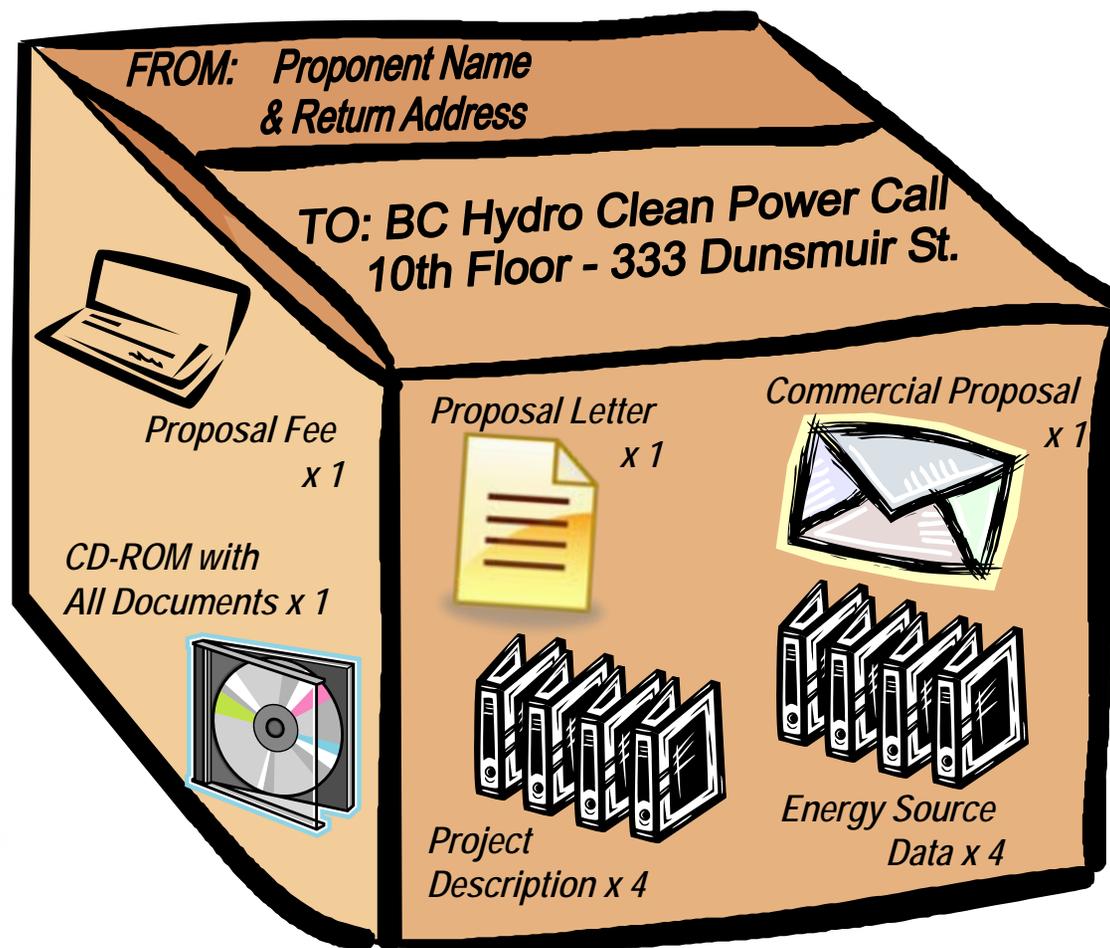
- File Interconnection Study Agreement
 - D-connected (with BC Hydro) **Nov. 7, 2008**
 - T-connected (with BCTC) **Nov. 17, 2008**
- Submit Proposal **Nov. 25, 2008**
- Submit FortisBC Interconnection Study (if applicable) **Dec. 1, 2008**

Each Proposal must have a valid Interconnection Study

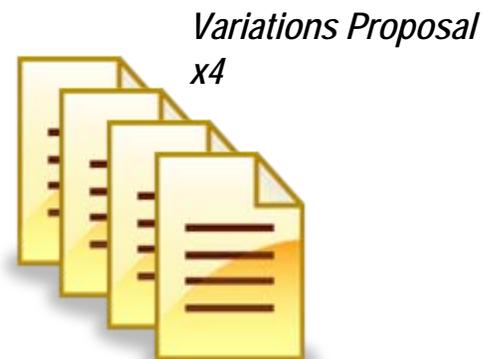
- must address all proposed Project configurations
- must be materially consistent with Proposal
- must have common Base Case Date of Nov. 17
 - previous interconnection requests or studies are not applicable

Proposal Contents

Required:



If Applicable:



Update:

- Disclosure Statement
- Confidentiality & Compliance Agreement
- Interconnection Disclosure Consent



Project Description and Energy Source Data

James Grant

- Project Description Requirements
- Attachments to Project Description
- Energy Source Data Requirements
- Risk Assessment Goals and Process
- Key messages in preparing your Proposal

The Project Description and Energy Source Data will be used in Proposal evaluation including:

- Eligibility review
- Risk assessment

● Seller's Plant Description

- Provide detailed description of physical infrastructure
- Reference nameplate capacities of all major equipment
- Align with information in Commercial Proposal

● Project Development Schedule

- Provide in Gantt chart form

● Interconnection Study agreements

- Include signed Interconnection Study agreements and technical background included in the interconnection application

● Interconnection details

- Provide detailed plans of proposed rights of way
- Include interconnection facilities in relevant sections of the Project Description (e.g., permits, land use requirements and consultation, etc.)

● Permits

- List and describe all required permits
- List and describe issued and unissued permits

● Development and Operating Organization Experience

- Table of existing electricity purchase contracts
- Table of electricity purchase contracts that have terminated or expired in the last 5 years

● Financing Plan

- All-in Project costs
- Method of financing

● Status of Financing

- Firm commitment letter from debt or equity providers
- Internally approved allocation from authorized officer

● Performance Security and Interconnection Security

Other sources of information used may include:

- Information in public domain – permitting agencies, news releases, Bloomberg Financial, etc.
- Independent third party advisors
- Internal BC Hydro advisors
- Other available sources

BC Hydro may seek clarifications from the Proponents and/or undertake further investigation concerning a Project, but BC Hydro is not obliged to do so

- Provides consistency of presentation across Proponents
- Three attachments
 - Indirect Interconnection – Consent to Disclosure
 - List of Anticipated Permits
 - Overview of Proponent's Financing Plan
- Attachments are supplemental and should be consistent with the information provided in the Project Description
- Attachments are located on the Clean Power Call RFP Website as separate downloadable form field documents

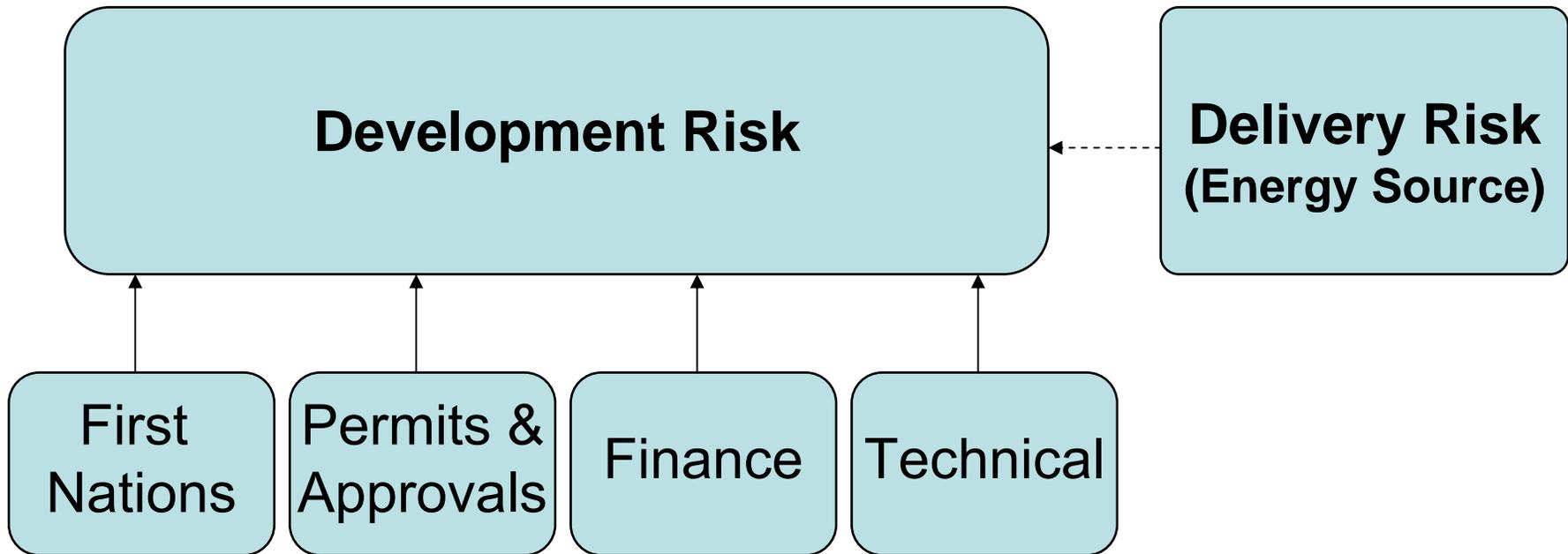
Used to assess delivery risk of the firm and non-firm energy profile offered

- All historical on-site data should be provided – a minimum of one year is required
- At least 10 years of data should be provided with correlation to on-site data
- Energy Source Data should be presented in a manner that clearly demonstrates the methodology of converting raw physical data into firm and non-firm energy profile in the Commercial Proposal

To assess the likelihood that a Project can reach commercial operation by proposed COD and perform substantially in accordance with the EPA terms

- Mitigates supply risk to BC Hydro
- Provides comfort to Proponents that they will be competing against quality projects for which reasonable development efforts have been made
- Enables BC Hydro to select a portfolio that balances price and risk

- The risk assessment is an element of the Clean Power Call evaluation and is different from the eligibility review
 - Not a “pass” or “fail”
 - Used throughout the evaluation process to assess the development risk and delivery risk attached to a potential portfolio
- Risk assessment teams include third party experts and BC Hydro specialists to review and provide recommendations on each Project



****Risk Assessment teams will be blind to, and unbiased by, price information in Commercial Proposal**

BE TRANSPARENT

- If you have identified an issue:
 - Disclose it fully
 - Provide a mitigation plan
 - Leaving sections blank may negatively impact risk assessment evaluation

- A well laid out Project Proposal will demonstrate the Proponent's current development status and their understanding of the development requirements ahead

Questions?



Commercial Proposal

Bill Peterson

● Purpose of the Commercial Proposal

- To set out the Proponent's offered pricing and other commercial terms for the Proposal being submitted to the Clean Power Call
- Provides the data needed to complete the quantitative evaluation, and to fill in some of the blanks in the EPA (if awarded)

● Some data is REQUIRED and some is OPTIONAL

● Some data to be entered by selecting values from drop-down menus (grey shaded cells); other data to be entered directly into form fields (yellow shaded cells)

● Each Commercial Proposal needs to be uniquely identified on the first page by the Proponent and Project name

- Download Commercial Proposal from the Clean Power Call RFP Website
 - Document is in MS Excel format
- MS Excel version of Commercial Proposal consists of 6 tabs (items #1 to #11, item #12, item #13, item #14, item #15, and signature block)
- Complete Commercial Proposal using MS Excel, then print out and sign the last page
- Submit one signed hard copy, and one soft copy on CD-ROM (MS Excel 2003 format, not MS Excel 2007 and not pdf)
- If any inconsistency between hard and soft copies, hard copy governs



Specimen EPA and Calculation Overview

Judy Baum

- Specimen EPA & Adaptations Guide
- Variations Proposal
- EPA Calculations
 - Firm Energy Pricing
 - Non-Firm Energy Pricing
 - Energy Allocation
 - Liquidated Damages
 - Firm Energy Adjustments
 - Performance Security
- Key Messages



- Specimen EPA sets out BC Hydro's preferred terms & conditions for certain Projects (e.g., seasonally firm energy, T-connected, non-phased projects, etc.)
- Adaptations Guide outlines how Specimen EPA will be modified for certain scenarios (e.g., hourly firm energy, D-connected, phased projects, wind projects, etc.)
- Specimen EPA and the Adaptations Guide replace and supersede the EPA Term Sheet
- Adaptations required to suit a particular Project may be provided by BC Hydro following Proposal submission
- Proponents may submit a Variations Proposal, but are strongly encouraged to limit to substantive matters

- Be clear and specific (e.g., redlined version of Specimen EPA)
- Briefly describe reason/need for/benefit of Variation
- Variations should be designated as either “Essential Variations” or “Value Variations”
 - Essential Variations
 - necessary to enable the Proponent to proceed with the Project
 - form part of the base offer
 - Value Variations
 - enable the Proponents to provide BC Hydro better value for money
 - do not form part of Proponent’s base offer
- Price “Value Variations” if appropriate
- Respect the “no-go zones” (submit only as “Value Variations”) or risk disqualification

- Proponent submits a price for firm energy (in Jan 1, 2009 dollars) including a cost for interconnection security
- Firm Energy Price is the offered firm energy price, escalated as elected by the Proponent and adjusted by a time of delivery factor
- Price Escalation
 - Pre-COD: 0% to 300% of Firm Energy Price to be escalated by BC CPI
 - Post-COD: 0% to 50% of Firm Energy Price to be escalated by BC CPI
- Time of Delivery Factors
 - 3 x 12 table
 - Value of energy to BC Hydro during the peak, super-peak and off-peak periods for each of the 12 months

- Two non-firm energy pricing options
 - Fixed Price Option A
 - Market Price Option B
- Proponents may select either option or a combination of the two options (in 10% increments)
- Option A% plus option B% must equal 100%

Option A: Fixed Price

- Set of pre-determined annual prices (Jan 1, 2009 dollars)
- Prices escalated at BC CPI commencing Jan 1, 2009
- Escalated price is adjusted by a time of delivery factor (TDF)
- Further adjustment for transmission losses from plant gate to Lower Mainland (use average loss factor of 6.28%)

Option B: Market Price

- Lesser of:

- 1) average of the daily Mid-C non-firm prices for the applicable delivery period in the month, and
- 2) \$250/MWh, escalated at BC CPI from Jan 1, 2009

- Adjustment for transmission losses from plant gate to Lower Mainland (use average loss factor of 6.28%)

- Firm to non-firm energy ratio calculated at the end of a season is used to allocate energy delivered during each of the 9 delivery periods within the season
- Actual payment is based on this allocation methodology
- Interim monthly payment
 - assumes firm energy from the seasonally firm energy delivery profile is delivered equally during the three months comprising the season
 - any delivered energy in excess of one-third of the seasonally firm energy is paid the non-firm Option A price at the end of each month
- Reconciliation of seasonal payment and sum of interim monthly payments occurs at the end of each season

- Firm and non-firm energy is calculated on an hourly basis
- Firm energy is the lesser of metered energy and hourly firm energy (HFE) commitment
- Non-firm energy is the difference between metered energy and HFE when metered energy is greater than HFE
- Delivery shortfall occurs when metered energy is less than HFE

- Delivery shortfall is computed on a seasonal basis
- Liquidated damages payment for delivery shortfall is calculated by multiplying the LD Factor by the seasonal delivery shortfall, and adjusting for transmission losses back to the Lower Mainland (use average loss factor of 6.28%)
- LD Factor is the greater of:
 - 1) Seasonal Mid-C Price less $[(\text{escalated FEP} * \text{seasonal TDF}) / (1 - \text{losses})]$, and
 - 2) \$5.00/MWh, escalated
- Seasonal Mid-C Price is the time-weighted average of the average Mid-C firm on-peak and off-peak price indices for the season
- Seasonal TDF is the time-weighted average of the applicable TDFs for the season

- Delivery shortfall is computed on an hourly basis
- Liquidated damages payment for delivery shortfall is calculated by multiplying an LD Factor by the hourly delivery shortfall, and adjusting for transmission losses back to the Lower Mainland (use average loss factor of 6.28%)
- LD Factor is the greater of:
 - 1) Mid-C Price less [(escalated firm energy price * TDF)/(1-losses) – Hourly Firm Credit, escalated], and
 - 2) \$5.00/MWh, escalated
- Mid-C Price means
 - off-peak hours – daily Dow Jones Mid-C firm off-peak price index
 - peak hours – daily Dow Jones Mid-C firm on-peak price index * (peak TDF/on-peak TDF)
 - super-peak hours – daily Dow Jones Mid-C firm on-peak price index * (super-peak TDF/on-peak TDF)

- First year of operation after COD is not included in the firm energy adjustment calculation
- Re-rated firm energy is evaluated at each 5-year interval following the first anniversary of COD and will be effective for the following 5 years
- Re-rated firm energy is the amount of hourly (seasonal) total energy delivery that was met or exceeded 80% of the time since the first anniversary of COD
- Upward re-rating of firm energy is capped at 110% of the offered firm energy amount in the Commercial Proposal
- Freshet firm energy (i.e., firm energy from May 1 to July 31, inclusive) is capped at 25% of annual firm energy

Project Stage	Description	Rate ² (\$/MWh in 2009\$)
1	EPA signing to Material Permits Expiry Date	\$2.50
2	From Material Permits Expiry Date to end of EPA Year 1	\$8.00
3	EPA Year 1 to end of EPA Year 6	\$6.00
4	For each 5-year period after EPA Year 6	
	Average Annual Firm Energy \geq 95% of FE Amount ¹	\$4.00
	Average Annual Firm Energy $<$ 95% of FE Amount ¹	\$6.00

¹Firm Energy amount is the average annual amount over the previous 5 years

²Performance Security rates for Project stages 1 and 2 are not escalated whereas for stages 3 and 4 are escalated using BC CPI

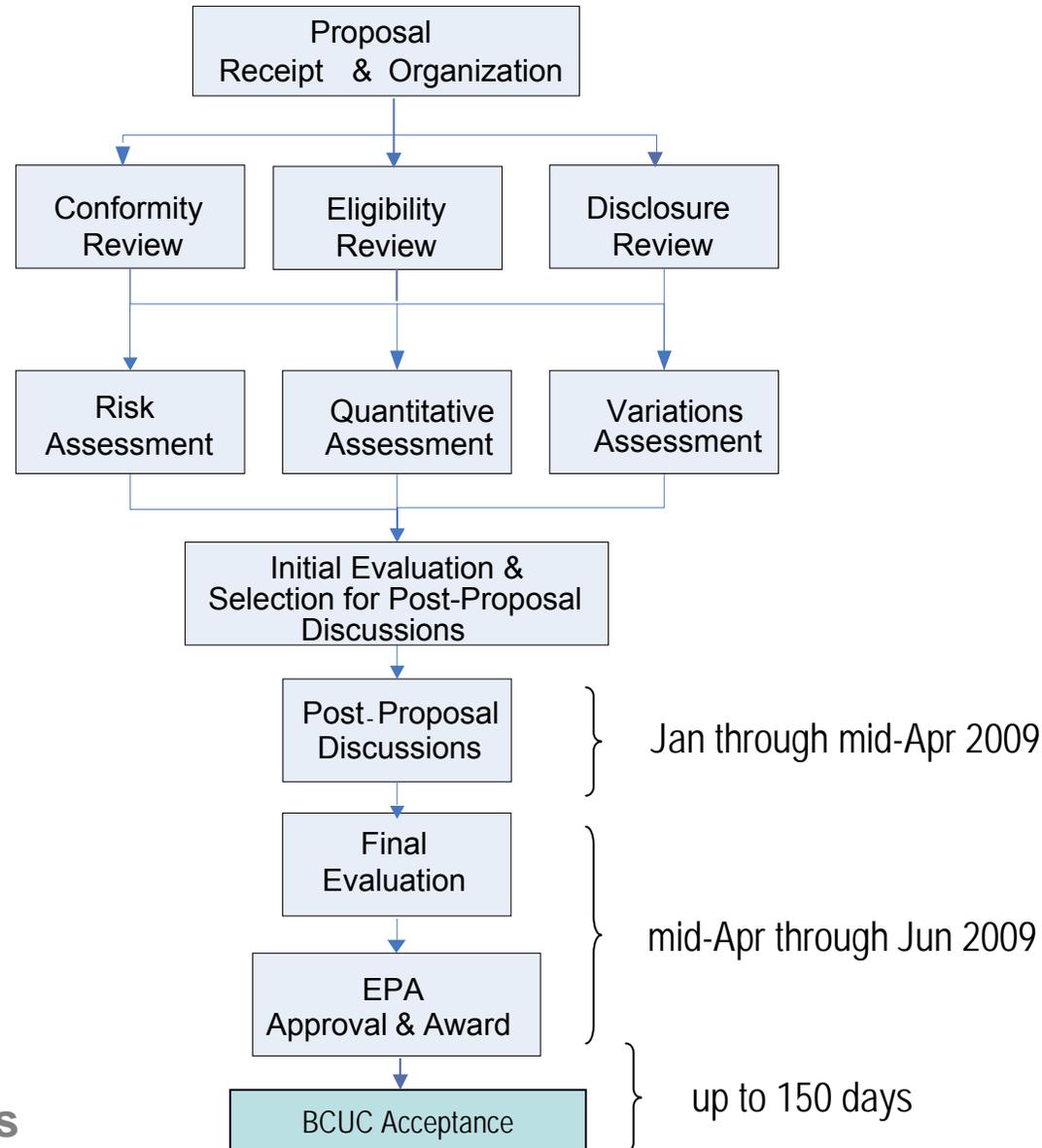
- Performance security for the first three stages =
applicable performance security rate * offered annual firm energy amount
- Performance security for each 5-year period following the first three stages =
applicable performance security rate * adjusted annual firm energy amount for the 5-year period

- Specimen EPA and Adaptations Guide replace and supersede EPA Term Sheet
- Variations Proposal (optional) should to be submitted as a redlined Specimen EPA and changes should be limited to substantive matters
- Respect “no-go zones” for Essential Variations, or risk disqualification
- References for EPA Calculations
 - Firm and non-firm energy prices (Appendix 3 of EPA)
 - Liquidated damages for Delivery Shortfalls (Section 13 of EPA)
 - Energy Allocation and Seasonal Reconciliation (Appendix 3 of EPA)
 - Firm Energy Adjustments (Section 7.10 of EPA)
 - Performance Security (Section 14 of EPA and Appendix 1 of EPA)
- Resources on Clean Power Call RFP Website
 - Sample Calculations
 - Computation Models (seasonally firm and hourly firm versions)



Post-Proposal Process

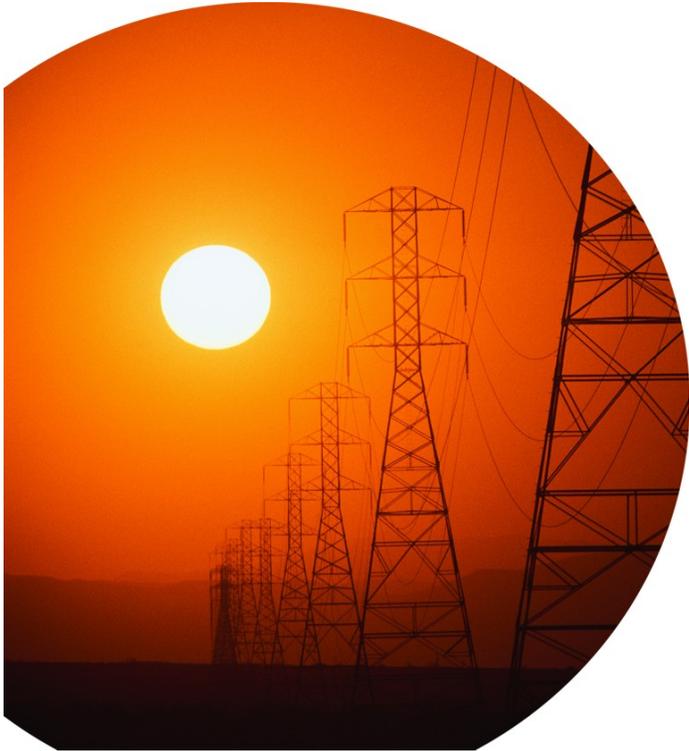
Andrea Loewie



- Registered Proponents should continue to direct all communications to the RFP Administrator, both pre- and post-Proposal:
 - BC Hydro
 - 10th Floor - 333 Dunsmuir Street
 - Vancouver, B.C. V6B 5R3
 - Attention: RFP Administrator (Clean Power Call)
 - email: cleanpower.call@bchydro.com
 - fax: 604-623-4335
- Proponents are requested to submit all Proposal related questions by Nov. 11, 2008
- Communication will be with designated Proponent contact person only – ensure designated contact is available to respond to time-sensitive matters
- Proponents may or may not be contacted during the post-Proposal discussion period – this is not indicative of the likelihood of an EPA award

- Ensure latest RFP documents are being used
- Limit proposals to “Eligible Projects”
- Make every effort to comply with RFP requirements and Proposal submission directions
- Be as fulsome as possible in your Proposal
- Limit Variations Proposals to matters of real significance
- Ensure that Proposals can stand alone

Late Proposals Will Not Be Considered



Power Acquisitions website:

www.bchydro.com/ipp

Clean Power Call website

www.bchydro.com/cleanpowercall

Questions

cleanpower.call@bchydro.com

Questions?