

REQUESTOR NAME: **BCOAPO**  
INFORMATION REQUEST ROUND NO: **1**  
TO: **BRITISH COLUMBIA HYDRO & POWER  
AUTHORITY**  
DATE: **January 7, 2019**  
PROJECT NO: **1598978**  
APPLICATION NAME: **APPLICATION FOR RELIABILITY  
COORDINATOR REGISTRATION WITH  
THE MANDATORY RELIABILITY  
STANDARDS PROGRAM**

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**1.0 Reference: Exhibit B-1, pages 1-2 to 1-3 (Table 1-1)**

- 1.1 Is BC Hydro the only party registered with the Commission for each of the following functions in BC: i) Balancing Authority, ii) Planning Authority/Planning Coordinator and iii) Resource Planner?
- 1.2 If not, what other parties are registered for each of these functions and, in each case, how is co-ordination effected between the various parties responsible for the function in BC?

**2.0 Reference: Exhibit B-1, page 2-6**

**Preamble:** Activities associated with the RC role include: “2. Identify, communicate, and direct actions if necessary to relieve reliability threats and limit violations in the reliability area”.

- 2.1 Does this aspect of the role of the RC include directing actions that would lead to capital expenditures by BC Hydro for new transmission facilities and/or transmission facility upgrades?
- 2.2 Could this lead to a situation where BC Hydro (as transmission owner) would be using the “direction” provided by BC Hydro (as RC) to justify a particular transmission-related capital expenditure?
- 2.3 How will BC Hydro (as RC) ensure and demonstrate to the Commission and other interested parties the impartiality and independence of any such “direction”?

**3.0 Reference: Exhibit B-1, page 2-6 and 2-7**

**Preamble:** Activities associated with the RC role include: “6. Direct revisions to transmission maintenance plans as permitted by agreements and 7. Direct revisions to generation maintenance plans as permitted by agreements.”

Ahead of time tasks associated with the RC role include: “9. Directs GOs and TOs to revise generation and transmission maintenance plans that are adverse to reliability”.

- 3.1 Does this aspect of the RC role mean that BC Hydro (as RC) will have an impact on the timing of the maintenance plans of other generation and transmission-owners in BC?
- 3.2 How will BC Hydro (as RC) ensure and demonstrate to the Commission and other interested parties the impartiality and independence of any such “directions”?

**4.0 Reference: Exhibit B-1, pages 3-6 to 3-8**

- 4.1 Please outline in greater detail the differences in the governance structure (i.e., reporting relationships and separation of RC operations from other activities) as between Alternative 1 (BCH has RC) and Alternative 2 (CAISO as RC) that resulted in the governance risk of Alternative 1 being rated as “low” whereas the governance risk of Alternative 2 being rated as “medium”.

**5.0 Reference: Exhibit B-1, pages 3-9 to 3-10; page 4-2, pages 4-4 to 4-5 and pages 4-7 to 4-8**

- 5.1 Please outline how the budget (Table 4-3) for the one-time start-up costs was established. In particular, in developing the budget, did BC Hydro draw on the experience of other RC’s in setting up their initial operations?
- 5.2 Is BC Hydro responsible for any of the costs incurred by WECC arising from the certification process?
  - 5.2.1 If yes, what types of costs is BC Hydro responsible for, what level of costs is included in the one-time start-up budget and what certification option (per Table 4-2) are these costs based on?
  - 5.2.2 How would the WECC costs that BC Hydro would be responsible for differ as between the three options set out in Table 4-2?
- 5.3 How would BC Hydro’s own costs vary depending upon the certification option chosen?
- 5.4 Please outline how the budget (Table 4-3) for the ongoing annual costs was established.
- 5.5 How did BC Hydro establish the staffing levels and individual staff positions that would be required for the RC function (per Figure 4-1)?

**6.0 Reference: Exhibit B-1, page 5-3  
Workshop Transcript Volume #1, pages 32 and 37**

**Preamble:** At page 5-3 the Application notes that FortisBC will be subject to procedures developed by BC Hydro as RC.

During the Workshop BC Hydro indicated that procedures were being drafted and reviewed with impacted parties.

- 6.1 Please outline the nature of the procedures (developed by BC Hydro as RC) that FortisBC and other parties in BC would be subject to and impacted by.
- 6.2 Will all impacted parties have the opportunity to review the procedures that BC Hydro is drafting prior to finalization?
- 6.3 What is process for resolving differences in views as to the content of the drafted procedures? Does the process involve a 3<sup>rd</sup> party (e.g., the BCUC) if necessary?

**7.0 Reference: Exhibit B-1, pages 6-1 to 6-2  
Workshop Transcript, Volume #1, pages 51-52**

**Preamble:** At the Workshop BC Hydro indicated it was most of the way through the selection of the team of seven for the RC shift roles and that all of the people that have been shortlisted have existing NERC certification and most of them are at the RC level.

- 7.1 Are all of those short-listed currently BC Hydro employees?
- 7.2 For those that are, in what areas of BC Hydro's organization do they come from and is NERC certification required for the positions that they currently hold?
  - 7.2.1 If yes, does the timing allow the employees that will be hired to replace those transferring to the RC Department to receive their NERC-certification before assuming their new responsibilities?

**8.0 Reference: Workshop Transcript Volume #1, pages 10-12  
Exhibit B-1, pages 3-4 to 3-10**

**Preamble:** During the Workshop BC Hydro identified two criteria (Capability and Public Interest) as the basis on which it should be assessed regarding its Application to be registered as the Reliability Coordinator.

In the Application, BC Hydro used four evaluation criteria (Reliability Benefit, Governance Risk, Implementation Risk and Financial) to evaluate the RC alternatives.

- 8.1 Can the four criteria used in the Application all be considered as being captured under either Capability or Public Interest?
- 8.2 Does Public Interest involve any considerations beyond the four used as evaluation criteria in the Application?

**9.0 Reference: Workshop Transcript, Volume #1, pages 31 and 36  
Exhibit B-1, pages 4-1 & 4-6 and Appendix C**

**Preamble:** BC Hydro states that the RC staff will be located at BC Hydro's existing control centers.

- 9.1 Are there any other functions carried out at the same control centres that require separation from the RC function based on either BC Hydro Standards of Conduct or the NERC Reliability Coordinator Standards of Conduct (Appendix C)?
- 9.2 If yes, are what are these other functions and what actions will be taken to ensure compliance with the relevant Standards of Conduct?

**10.0 Reference: Exhibit B-1, page 4-6 and Appendix C**  
Workshop Transcript, Volume #1, page 39

Preamble: The Application states: "All employees of BC Hydro that are actively involved in real-time transmission or marketing functions, or who have access to non-public transmission function information, are bound by an existing BC Hydro Standards of Conduct that prevents non-public transmission information from being released to market function employees before it is publicly available. Any new staff joining the RC team will also be bound by this Standards of Conduct. In addition, BC Hydro proposes that, if deemed necessary by the BCUC, it will adhere to a RC Standards of Conduct in a form adopted by the BCUC for use in B.C. and substantially similar to the NERC Reliability Coordinator Standards of Conduct, attached for reference as Appendix C".

10.1 Does BC Hydro have a proposal for a RC Standards of Conduct for use in B.C.?

10.1.1 If yes, please provide.

10.1.2 If yes, please outline how this proposal differs from the NERC Reliability Coordinator Standards of Conduct, attached for reference as Appendix C?

10.2 In BC Hydro's view would there be any issues with the BCUC adopting the NERC Reliability Coordinator Standards of Conduct for use in BC? If yes, what are they?

10.3 During the Workshop reference was made to Hydro Quebec's standards of conduct with respect to the RC function. Please provide a copy and indicate how they differ from: i) BC Hydro's Standards of Conduct and ii) the NERC Reliability Coordinator Standards.

**11.0 Reference: Exhibit B-1, pages 4-4 to 4-6**  
**Workshop Transcript, Volume #1, page 44**

Preamble: BC Hydro is recommending that an RC assurance review be conducted by the WECC that exempts certain standards that are already applicable to B.C. in its existing functions

11.1 BC Hydro proposes to form a new RC Department to carry out the RC function. Even if a standard is already applicable to BC in its other roles (e.g. Transmission owner/operator or Balancing Authority), does there not need to be some assurance that the staff in the newly formed RC

Department is capable of carrying out these responsibilities as they apply to the RC function?

**12.0 Reference: Workshop Transcript, Volume #1, pages 46-47**

**Preamble:** During the Workshop BC Hydro indicated that it would be February/March 2019 before the documents with respect to governance and independence were completed.

12.1 Does the February/March 2019 timing allow for any concerns regarding these documents to be addressed as part of this proceeding?

12.1.1 If yes, how does BC Hydro see the schedule for current proceeding accommodating such concerns?

12.1.2 If not, how does BC Hydro see any concerns raised by other parties regarding these documents being addressed in fair manner that adheres to BC Hydro's overall schedule?

**13.0 Reference: Workshop Transcript, Volume #1, page 36**

**Preamble:** During the Workshop, Mr. Steed indicated that as the manager of BC Hydro's Provincial Reliability Coordination Operations, he would be reporting to Paul Choudhury, the Utility's Director of Transmission Systems Operations.

13.1 Please provide an infographic similar to the one reproduced below (BC Hydro 2004-2006 RRA, BCUC IR 1.83.1, page 6<sup>1</sup>) showing where BC Hydro is proposing to site the MRS Reliability Coordination group within its organization.

13.1.1 Please show all lines of Communication that will be permitted between the MRS RC Group and other areas of BC Hydro's operations.

13.1.2 Please show all lines of reporting between the MRS RC Group and any other areas of BC Hydro's operation.

13.1.3 Please indicate specifically who or what positions within the BC Hydro organizational chart generated in response to 13.1 will have the power to investigate, discipline, hire or fire those within the BC Hydro MRS Reliability Coordinator Group, including Mr. Steed.

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ORGANIZATION CHART

