



VIA EFILE

October 6, 2016

**FORTISBC INC. CPCN CORRA LINN DAM SPILLWAY GATES
EXHIBIT A-7**

Ms. Diane Roy
Vice President, Regulatory Affairs
FortisBC Inc.
Suite 100, 1975 Springfield Road
Kelowna, BC V1Y 7V7

Dear Ms. Roy:

Re: FortisBC Inc.
Project No. 3698883
Application for a Certificate of Public Convenience and Necessity for Replacement
of the Corra Linn Dam Spillway Gates

Further to British Columbia Utilities Commission Order G-107-16 establishing the Regulatory Timetable with respect to the above noted application, enclosed please find the Commission's Information Request No. 2. In accordance with the Regulatory Timetable, please file your responses electronically with the Commission on or before Monday, October 31, 2016.

Yours truly,

Original signed by:

Laurel Ross

/dg
Enclosure

FortisBC Inc.
Application for a Certificate of Public Convenience and Necessity
for the Corra Linn Dam Spillway Gate Replacement Project

A. BENEFITS DERIVED FROM THE CORRA LINN DAM

9.0 Reference: CANAL PLANT AGREEMENT
Exhibit B-3 BCUC IR 1.2.2; FortisBC Inc. (FBC) 2012-2013 Revenue Requirements and
Review of ISP, 2012 Long Term Resource Plan, Exhibit B-1-2, p. 45
BC Hydro Power Purchase Agreement

In its 2012 Long Term Resource Plan, FortisBC stated that under the Canal Plant Agreement, British Columbia Hydro and Power Authority (BC Hydro) determines the output of the Entitlement Parties' plants and takes all the power actually generated by the plants into its system. In exchange, the Entitlement Parties are contractually entitled to their respective "entitlements" of capacity and energy from BC Hydro.

In response to the British Columbia Utilities Commission (BCUC) Information Request (IR) 1.2.2, FortisBC states that it anticipates that the value of the avoided power purchase expense would increase annually and assuming a constant 3 percent nominal rate increase, this replacement cost could reach over \$33 million in the final year of the BC Hydro Power Purchase Agreement (PPA), which expires on September 30, 2033.

- 9.1 Does the Canal Plant Agreement have an expiry date? If yes, when does it expire and does FortisBC expect to be able to renew it under similarly beneficial terms? If not, please explain.
- 9.2 Do the water rights associated with the Corra Linn facilities expire? If yes, when do they expire?
- 9.2.1 If the water rights expire, does FortisBC have any reason to believe they would not be renewed under the existing conditions? If there is any reason for renewal concern, please provide detail and explain.
- 9.3 Does FortisBC expect to derive similar benefits from the Corra Linn facilities after the BC Hydro PPA expires in 2033? Please explain.
- 9.3.1 What benefits would the Corra Linn facilities provide if FortisBC were unable negotiate a new PPA with BC Hydro?

B. CONTRACTING METHOD

10.0 Reference: CONTRACTOR SELECTION AND AWARD
Exhibit B-3, BCUC IR 2.3, 2.3.3 and 2.1
Early Contractor Involvement

In response to BCUC IR 2.3, FortisBC states that Under the Early Contractor Involvement (ECI) model:

- it will engage a third party Owner's Engineer to provide engineering services such as review of the engineering design and work packages, construction support and to assist FortisBC in evaluating, validating and confirming that the negotiated contractor's Project costs are reasonable;

- that because of the collaborative development of cost and the equitable allocation of risks, savings are shared and effectively FortisBC and the contractor participate in any gains/losses eliminating the need for a penalty/incentive mechanism;
- at the end of the Open Book Phase the parties agree on a lump sum fixed price and a Project Implementation Plan for the Design Build Phase. The fixed price agreed to means the contractor effectively holds all of the Project's construction risks assigned to the contractor;
- approximately 70% of the estimated total contractor cost would be for subcontracted works and materials procurement and would be competitively tendered. The selection of successful tenders will be made jointly by FortisBC and the contractor;
- construction is done under a single bonded lump sum contract, which produces a more manageable contract, increases certainty of the Project costs and reduces risk for both parties.

- 10.1 When does FortisBC intend to engage an Owner's Engineer? Will the Owner's Engineer be evaluating and providing input into the contracting method selection?
- 10.2 Please confirm that FortisBC will select a contractor in July 2017 for the detailed design (Open Book Phase). What, if any, engagement with contractors, other than HMI, does FortisBC plan prior to selecting a contractor?
- 10.3 Please compare and contrast the level to which detailed scope documents (technical specifications, drawings and work procedures) prepared during the Open Book Phase of the ECI process to the design phase in a traditional design tender process.
- 10.3.1 Does the finalization of the technical specifications, drawings and work procedures during the Open Book Phase include documentation for all subcontracted works and materials procurement? If not, please explain to what level these scope documents will be completed during this phase.
- 10.4 Please confirm or otherwise explain that under the ECI model with a lump sum fixed price construction contract, if a subcontract is bid below the cost estimate prepared in the Open Book Phase that the savings would be to the benefit of the contractor.
- 10.5 Please describe the process under which the joint selection of tenders would be made. Under what circumstances would FortisBC be able to rule out the lowest cost bid?
- 10.6 Please describe in detail the mechanism for both parties participating in gains / losses. How does this mechanism work given that the "construction is done under a single bonded lump sum contract?" To which costs does the mechanism apply?

In response to BCUC IR 2.3.3, FortisBC states that in the event that the ECI model is selected, the contractor's profit will be transparent to FBC and will be based on a mutually agreed upon negotiated percentage.

- 10.7 Under the ECI model, what is the base from which the contractors profit is calculated?
- 10.8 Would FortisBC be willing to file a letter with the Commission from the Owner's Engineer stating that the Owner's Engineer has reviewed: a) the contractor's Project costs and finds them to be to be fair market value; b) the scope/work package documents associated with the contractor's Project costs and finds them to be consistent with industry best practice in general and consistent with the objective of minimizing the overall project cost; and c) the design, specifications and scope/work package documents and finds them to be consistent with industry best practice in general and consistent with the objective of minimizing the overall cost from change orders? If not, why not? If appropriate, please provide alternate wording.

In response BCUC IR 2.1, FortisBC states it has recently performed spillway gate rehabilitations at two facilities owned by third parties.

10.9 What was the combined rough magnitude of the spillway gate rehabilitation project budgets?

**11.0 Reference: CONTRACTOR SELECTION AND AWARD
Exhibit B-3, BCUC IR 2.3, 2.7
Tendered contract**

In response to BCUC IR 2.3, FortisBC states that a contract has not been established with HMI and their involvement to date has been limited to assistance in the preparation of the Class 3 cost estimate for the project.

11.1 Please confirm whether FortisBC will retain the option of tendering the main construction contract through the Open Book Phase of the ECI process. If not confirmed, please explain why not.

11.1.1 What would be the schedule and cost impacts, if any, in the event FortisBC were to tender the main construction contract at the end of the Open Book Phase?

11.1.2 If HMI is selected under ECI contract model, does HMI have any specialized equipment or processes that could limit the ability of competing firms bidding on the project from competitively under a tender scenario? If yes, please describe how this is being managed to keep a competitive tender process a viable option.

In response to BCUC IR 2.3 and 2.7 respectively, FortisBC states:

- that under the ECI model, risk quantification is transparent and the risk is built into the contract contingency; and if the risk does not manifest, then the associated contingency cost is not incurred and is not charged to FortisBC. This is unlike a fixed price contracting method, where the contractor will typically build risk costs into the contract price and the company will pay for those costs regardless of whether the risk costs manifest or not; and
- the costs estimated in the Application qualify as an AACE Class 3 estimate and is not expected to change based on the contracting model chosen.

11.2 Why is price expected to be the same for the ECI and Design Tender processes, if a tendered contractor “will typically build risk costs into the contract price and the company will pay for those costs regardless of whether the risk costs manifest or not?”

C. COST ESTIMATE AND CONTINGENCY

**12.0 Reference: CAPITAL COST ESTIMATE
Exhibit B-3, BCUC IR 2.7
AACE Class 3 estimate**

In response to BCUC IR 2.7, FortisBC states the costs estimated in the Application qualify as an AACE Class 3 estimate and is not expected to change based on the contracting model chosen.

- 12.1 Given that the level of project definition expressed as % of complete definition for a AACE Class 3 estimate is 10-40%, what level of project definition is the cost estimate provided in the Application based on?
- 12.2 What is the confidence level of the cost estimate, i.e., what is the probability that the actual cost will be equal to or lower than the estimate provided?