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June 13, 2008

<u>Via Email</u> Original via Courier

Ms. Erica M. Hamilton Commission Secretary BC Utilities Commission Sixth Floor, 900 Howe Street, Box 250 Vancouver, BC V6Z 2N3

Dear Ms. Hamilton:

Re: An Application for a CPCN for the Advanced Metering Infrastructure (AMI) Project No. 3698493

Please find enclosed FortisBC Inc.'s Final Argument with regard to the above noted project. Twenty copies will be couriered to the Commission.

Sincerely,

David Bennett Vice President, Regulatory Affairs and General Counsel

cc: Registered Intervenors

FINAL WRITTEN SUBMISSION OF FORTISBC INC.

A. **INTRODUCTION**

- On December 19, 2007, FortisBC Inc. ("FortisBC" or "the Company") applied (the "Original Application", Exhibit B-1) to the British Columbia Utilities Commission ("BCUC" or "the Commission") pursuant to Sections 45 and 46 of the Utilities Commission Act, for a Certificate of Public Convenience and Necessity ("CPCN") for the Advanced Metering Infrastructure ("AMI") Project.
- On January 4, 2008, the Commission issued Order No. G-1-08 (Exhibit A-1) which established a Written Public Hearing process for the review of the Application and set down a Regulatory Timetable for the proceeding as Appendix A to that Order.
- Pursuant to the Regulatory Timetable FortisBC responded to Commission and Registered Intervenor Information Requests No. 1 and No. 2 on February 23, 2008 and March 19, 2008, respectively.
- 4. On March 28, 2008, FortisBC filed an amendment to the Original Application (the "Amended Application", Exhibit B-6). The Company stated that the Amended Application provided additional functionality, not included as part of the Original Application, that further supports the 2007 BC Energy Plan ("Energy Plan"), and that the Amended Application was filed as a result of ongoing consultation with stakeholders, including the provincial government. Where appropriate, FortisBC provided updated responses to Information Requests No. 1 and No. 2, reflecting the Amended Application. The Company also requested the Commission to extend the Regulatory Timetable to reflect the Amendment to the Original Application.
- On March 31, 2008, the Minister of Energy, Mines and Petroleum Resources announced Bill 15-2008, The Utilities Commission Amendment Act, 2008 ("Bill 15"). Bill 15 included provisions to the Amended Application. Pursuant to the Commission's requests

in Exhibit A-6 dated April 2, 2008, FortisBC confirmed (Exhibit B-9) its Amended Application and stated that the Amended Application is supportive of and consistent with Bill 15. A number of Intervenors filed comments on Exhibit B-9 and the proposed amendments to the Regulatory Timetable.

- 6. On April 30, 2008, the Commission issued Order G-62-08 (Exhibit A-8) establishing an Amended Regulatory Timetable to include the filing of Intervenor evidence as well as an additional round of Information Requests limited to the content of the Amendment to the Original Application.
- Bill 15 received Royal Assent on May 1, 2008, amending the Utilities Commission Act ("UCA") in certain respects.
- FortisBC responded to Commission Information Requests and Intervenor Information Requests. No Intervenors filed evidence on the Application. FortisBC now submits this Final Written Submission in support of the Application.

B. <u>PROJECT DESCRIPTION</u>

- 9. FortisBC proposes to replace all meters within its service territory with AMI-enabled meters, and to install the required communications infrastructure to facilitate remote meter reading capability. FortisBC expects to complete implementation throughout its service territory over a three year period beginning in 2008.
- 10. The major elements of the Project include: the purchase and installation of approximately 108,000 solid-state, AMI-enabled meters; the design, purchase and installation of a network infrastructure capable of collecting and communicating remote meter readings; and an upgrade to the Company's information technology ("IT") infrastructure to accept, bill and report on the interval readings provided by the AMI.

- 11. FortisBC has identified three potential AMI solutions to deliver the benefits identified in the Application; Power Line Carrier technology, Radio Frequency technology, and a hybrid technology solution. A Request for Proposal will be issued to vendors following approval of the Amended Application.
- 12. As a result of ongoing consultation with stakeholders, including the provincial government, FortisBC submitted the Amended Application which recommends two functional enhancements that will provide additional benefits to rate payers (Exhibit B-6, letter to BC Utilities Commission, page 2):
 - Provision for hourly readings through a Validation, Estimation and Editing
 ("VEE") equipped Meter Data Management Repository ("MDMR"), identified in
 Table 7.1 of the Original Application (Exhibit B-1) as an optional feature; and
 - A Home Area Network ("HAN"), which is the technology required to enable inhome consumption display devices in the future.
- 13. AMI systems employing VEE technology are in use or are planned in many jurisdictions in North America, including Ontario, California, and Texas (Exhibit B-6, page 8). BC Hydro has indicated that it will specify a VEE-enabled MDMR, hourly readings and HAN capability for its Smart Meter Initiative ("SMI") (Exhibit B-11, Response to BCUC Information Request No. 3 Q51.1).
- 14. This additional functionality results in an increase to the capital cost of the Project of \$6.0 million, to \$37.3 million (Exhibit B-6, page 13). FortisBC submits that the Project costs, including the incremental costs, are justified by the benefits of the Amended Application and its support for the government's energy objectives set out in the UCA and the Energy Plan, and are in the public interest.
- 15. The benefits of the AMI Project will be achieved at a forecast rate impact over a twenty-five year period of 0.11 percent in net present value (NPV) terms, (Exhibit B-6-3, page 14), compared to a NPV rate impact of -0.09 percent in the Original Application.

16. FortisBC also requests an accounting order, consistent with the Canadian Institute of Chartered Accountants (CICA) Handbook, to defer the net book value, less proceeds of disposal from the meters to be retired, and to amortize the deferred amount at the existing depreciation rate for meters, 3.5 percent.

C. **PROJECT BENEFITS**

- 17. FortisBC submits that the Project is justified because it provides benefits that will yield immediate cost savings, has other operational, customer service, and environmental benefits, and will provide the backbone infrastructure which is necessary for FortisBC to meet the provincial government's energy objectives as defined in the UCA, which are more specifically set out below.
- 18. The Project benefits can be summarized as follows:

Cost Savings

- 19. Cost savings, estimated at \$2.39 million annually, will result primarily from automation of the meter reading function (Table 4.1.1, page 12, Exhibit B-6).
- 20. FortisBC states in response to BCUC Information Request No. 1 Q1.1 that the full amount of the net operating savings will be used to reduce revenue requirements to the benefit of ratepayers. The means of recognizing the reduction will depend on the type of rate-setting mechanism (Performance-Based Rates or other) in place in 2010, and may be subject to a Negotiated Settlement Process with ratepayers prior to Commission approval.

Other Benefits

21. The Original Application at page 17 (Table 4.1.2. Exhibit B-1) describes a number of "soft" benefits which are beneficial to customers but are difficult or not possible to

quantify. Customer service benefits include greater accuracy of meter reads, a reduction in billing estimates, and less frequent need for access to customers' premises.

22. Other benefits include improvements to financial reporting, load forecasting and system planning, and increased employee and public safety due to the elimination of manual meter reading.

Provincial Energy Objectives

- 23. Section 1 of the UCA defines the "government's energy objectives" as follows:
 - (a) to encourage public utilities to reduce greenhouse gas emissions;
 - (b) to encourage public utilities to take demand-side measures;
 - (c) to encourage public utilities to produce, generate and acquire electricity from clean or renewable sources;
 - (d) to encourage public utilities to develop adequate energy transmission infrastructure and capacity in the time required to serve persons who receive or may receive service from the public utility;
 - (e) to encourage public utilities to use innovative energy technologies
 - (i) that facilitate electricity self-sufficiency or the fulfillment of their long-term transmission requirements, or
 - (ii) that support energy conservation or efficiency or the use of clean or renewable sources of energy;
 - (f) to encourage public utilities to take prescribed actions in support of any other goals prescribed by regulation.
- 24. The objective of reducing greenhouse gas emissions (energy objective (a)) will be met by eliminating vehicle usage associated with manual meter reading. FortisBC's service territory is characterized by low customer density, variable terrain and weather conditions and a largely radial road network that requires vehicle use for meter reading. FortisBC meter reading vehicles drive more than 400,000 kilometres and consume 85,000 litres of gasoline, resulting in an estimated 217.6 tonnes of greenhouse gas emissions annually (Exhibit B-1, page 24).
- 25. The Amended Application supports the government's energy objectives (b) and (e)(ii) by providing opportunities to implement Demand Response, Demand Side Management, and other conservation measures, which will become available following the

implementation of AMI technology and customer load research, subject to additional expenditures and approvals. These may include time-based rates or other rate structures designed to support conservation opportunities based on interval readings and other initiatives such as remote load control devices for appliances such as hot water heaters. This is also supportive of the Energy Plan.

- 26. Targeted line loss reduction also supports the government's energy objective (e) relating to innovative energy technologies. AMI, in conjunction with FortisBC's Distribution Substation Automation Project (approved by Commission Order No. C-11-07) will facilitate the reduction of distribution system losses. The Company identified that substation automation together with AMI will improve the informational capability to identify and reduce system losses (Exhibit B-1, page 21).
- 27. In addition, the Energy Plan states that utilities should "…research, develop and implement best practices in conservation and energy efficiency and to increase public awareness. …
 Utilities are also encouraged to explore and develop rate designs to encourage efficiency, conservation and the development of renewable energy." (Exhibit B-11, Horizon Appendix 1.1, page 5)
- 28. The Energy Plan objective of increasing public awareness with regard to conservation and energy efficiency will be addressed through the provision of better information to customers. The AMI Project initially will allow customers to use a secure log-in over the internet to view daily consumption data (Exhibit B-1, page 19), and based on the functionality included in the Amended Application, will support future in-home display devices providing real-time consumption information (Exhibit B-6, page 5).
- 29. FortisBC intends to use a staged approach to the development of Demand Response, Demand Side Management, and rate strategies (page 4, lines 9 – 17, Exhibit B-11, Response to BCUC Information Request No. 3 Q37.1.1). An AMI system will provide the means to accumulate customer data that will enable a detailed analysis of current

usage patterns, without which effective rate design, based on credible expectations of potential energy and demand savings, is not possible.

30. As noted in response to Horizon IR No. 3 Q3.5 (Exhibit B-11), FortisBC estimates that conservation-based rates including time-based rates (time-of-use or critical peak pricing) could shift between 2 and 5 percent of energy use to periods of lower demand.

D. OTHER CONSIDERATIONS

BC Hydro Smart Metering Initiative

31. FortisBC and BC Hydro continue to exchange information on respective projects, as indicated in BC Hydro's letter dated March 20, 2008, which is provided in response to Amended BCUC Information Request No. 2 Q21.7 (Exhibit B-6). As noted in the response to BCUC No. 3 Q51.1 (Exhibit B-11), the functionality understood by FortisBC to be included in the BC Hydro SMI project scope, subject to finalization, is consistent with the functionality in the Amended Application. FortisBC will continue to work with BC Hydro to ensure an appropriate level of compatibility. However, there is no evidence or requirement that the utilities' AMI/SMI systems should be exactly the same in terms of technology or interoperability. FortisBC has put forward an application, the functionality of which is in the best interests of its customers.

"Smart Metering" Regulation

32. The UCA sets out clear considerations that the Commission should take into account when a public utility other than BC Hydro makes an application for advanced meters. Section 64.04 (4) states:

If a public utility, other than the authority, makes an application under the Act in relation to advanced meters, the commission, in considering that application, must consider the government's goal of having advanced meters and associated infrastructure in use with respect to customers other than those of the authority.

- 33. FortisBC submits that the Amended Application is consistent with the UCA and that delaying the AMI Project pending either regulation regarding BC Hydro's smart meters, or the filing of BC Hydro's SMI application, would be inconsistent with the UCA and in particular section 64.04 (4) referenced above.
- 34. The provincial Ministry of Energy, Mines and Petroleum Resources has stated its support for both the Original and Amended Applications: A letter from the Ministry dated concurrently with the introduction of Bill 15 in the legislature, (Attachment A, Exhibit B-9), confirms that:

"The Ministry is supportive of FortisBC's December 19, 2007 application to the British Columbia Utilities Commission for an Advanced Metering Infrastructure (AMI) project, as well as the enhancements to that application that have been discussed with Ministry staff and are reflected in your amended application dated March 28, 2008. The applications are consistent with the 2007 Energy Plan's policy action #4 that supports utilities to implement rate structures that encourage energy efficiency and conservation, as the AMI project will allow FortisBC to implement such rates." (Exhibit B-9)

35. FortisBC further submits there is no reason, arising from the amendments to the UCA, or related to future actions of the provincial government or of BC Hydro, that the Amended Application should not be approved, or that the implementation of the AMI Project should be delayed.

E. <u>CONCLUSION</u>

- 36. Accordingly, FortisBC submits that the Amended Application should be allowed for the following reasons:
 - it meets a number of the government's energy objectives as defined in the UCA, specifically objectives (a), (b), and (e);
 - it is consistent with the Energy Plan, including policy action No. 4 as recognized by the Ministry of Energy, Mines and Petroleum Resources; and

 it is, particularly in light of the associated benefit to customers described in the Original Application and the Amended Application, in the public interest, and accordingly FortisBC requests that the Commission approve the Amended Application and issue a Certificate of Public Convenience and Necessity for the Amended Application.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

David Bennett, Vice President, Regulatory Affairs and General Counsel FortisBC Inc.