

25th Floor
700 W Georgia St

Vancouver, BC
Canada V7Y 1B3

Tel 604 684 9151
Fax 604 661 9349

www.farris.com

Reply Attention of: Ludmila B. Herbst
Direct Dial Number: (604) 661-1722
Email Address: lherbst@farris.com

Our File No.: 05497-0216-0000

November 6, 2013

BY EMAIL

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, BC V6Z 2N3

**Attention: Erica M. Hamilton,
Commission Secretary**

Dear Sirs/Mesdames:

**Re: FortisBC Inc. – Application for an Advanced Metering
Infrastructure Radio-Off Meter Option**

Enclosed please find the Final Submissions of FortisBC Inc. dated November 6, 2013. Twenty hard copies will follow by courier.

Yours truly,

FARRIS, VAUGHAN, WILLS & MURPHY LLP

Per:



Ludmila B. Herbst

LBH/lb

Enclosure

c.c.: Registered Interveners
Boughton Law Corporation – Attention: Gordon Fulton, Q.C.
FortisBC Inc. – Attention: Dennis Swanson

BRITISH COLUMBIA UTILITIES COMMISSION

IN THE MATTER OF
the *Utilities Commission Act*, R.S.B.C. 1996, Chapter 473

and

FortisBC Inc.
Application for a Radio-Off
Advanced Metering Infrastructure Meter Option

**FINAL SUBMISSIONS OF FORTISBC INC.
NOVEMBER 6, 2013**

FortisBC Inc.
Regulatory Affairs Department
100 – 1975 Springfield Road
Kelowna, BC V1Y 7V7
Telephone: (250) 717-0890
Facsimile: 1-866-335-6295
Attention: Dennis Swanson
Director of Regulatory Affairs

Counsel for FortisBC Inc.
Farris, Vaughan, Wills & Murphy LLP
2500 – 700 West Georgia Street
Vancouver, BC V7Y 1B3
Telephone: (604) 661-1722
Facsimile: (604) 661-9349
Attention: George K. Macintosh, Q.C.
Ludmila B. Herbst

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PART I - INTRODUCTION

A. Procedural Background

1. On July 23, 2013, the British Columbia Utilities Commission issued Order C-7-13 on the Application of FortisBC Inc. (**FortisBC** or the **Company**) for a Certificate of Public Convenience and Necessity (**CPCN**) for the Advanced Metering Infrastructure (**AMI**) Project. The Commission granted a CPCN subject to the condition that FortisBC confirm in writing by August 1, 2013 that it would file an application for an opt-out provision by November 1, 2013 based on the following principles:¹

1. Customers may choose to opt-out of accepting a wireless transmitting meter.
2. Customers who choose to opt-out will be provided with an AMI meter that has the wireless transmit functions disabled. Transmit functions on these meters will remain disabled until the individual chooses to opt back in to the AMI program; in the event that the customer moves to a new property, the opt-out choice will move with the customer.
3. The incremental cost of opting-out of the AMI program will be borne by the individual choosing to opt-out.

(collectively, the **Commission Radio-Off Principles**)

2. On July 31, 2013, FortisBC confirmed in writing that it would file the stipulated application. On August 30, 2013, FortisBC filed the Advanced Metering Infrastructure Radio-Off Meter Option Application (the **Application**).²

3. A Draft Order approving the Application was included as Appendix A to the Application.³

4. The Commission ordered a regulatory timetable for a written hearing process for the Application on September 18, 2013⁴ and amended the regulatory timetable on October 1, 2013⁵ with a further amendment on October 24, 2013.⁶

¹ Order C-7-13; Order G-154-13; Exhibit B-1 – FBC’s Application at p. 1. A copy of Order C-7-13 may also be found at Exhibit B-6 – FBC’s Response to BCSEA IR – Attachment 1.1.

² Exhibit B-1 – FBC’s Application.

³ Exhibit B-1 – FBC’s Application at p. 1.

⁴ Exhibit A-2 – Order G-154-13.

B. Commission Radio-Off Principles

5. The Commission Radio-Off Principles are important and were the basis on which the Company decided to proceed with the AMI Project despite the existence of an opt-out option, which it had earlier opposed. The considerations that influenced the Company's decision include the following:⁷

- (a) The fact that, pursuant to the second of the Commission Radio-Off Principles, customers wishing to "opt-out" will receive a radio-off AMI meter means that the Company and customers will receive the same data that they would through the radio frequency (**RF**) local area network (**LAN**), but less frequently.
- (b) The third of the Commission Radio-Off Principles ensures that those customers who accept a standard AMI meter will not be subsidizing those customers who choose the radio-off option.

6. Again, the first of the Commission Radio-Off Principles states:

Principle 1: Customers may choose to opt-out of accepting a wireless transmitting meter.

It follows that mechanisms must be available for customers to communicate their decision to opt out of accepting a wireless transmitting meter. There is no requirement in the Commission Radio-Off Principles that customers must provide a reason or basis for their decision to opt out, or to meet any particular conditions or tests. The choice to opt out will be available to all those customers scheduled by FortisBC to receive AMI meters.

7. The second of the Commission Radio-Off Principles states:

Principle 2: Customers who choose to opt-out will be provided with an AMI meter that has the wireless transmit functions disabled. Transmit functions on these meters will remain disabled until the individual chooses to opt

⁵ Exhibit A-3 – Order G-160-13.

⁶ Exhibit A-6 – Order G-176-13.

⁷ Exhibit B-1 – FBC's Application at p. 2.

back in to the AMI program; in the event that the customer moves to a new property, the opt-out choice will move with the customer.

The second principle requires FortisBC to provide customers who choose to opt out with an AMI meter with the wireless transmit functions disabled. It follows that customers who choose to opt out will receive AMI meters and will not retain their pre-AMI meters.

8. The third of the Commission Radio-Off Principles states:

Principle 3: The incremental cost of opting-out of the AMI program will be borne by the individual choosing to opt-out.

This principle requires that the customers choosing to opt out must bear the incremental cost of opting out of the AMI program. It follows that FortisBC must calculate the incremental cost of an individual customer's choice to opt out and recover it from each customer who chooses to opt out. Customers choosing to opt out will neither subsidize nor be subsidized by other FortisBC customers.

PART II - IMPLEMENTATION OF THE COMMISSION RADIO-OFF PRINCIPLES

9. The implementation of AMI will mark a significant change in how the Company serves its customers, providing numerous immediate and future benefits as recognized in the Commission Decision of July 23, 2013. The opportunity for improved control over the cost of electricity, both by customers and by the Company, is a fundamental driver behind the AMI Project.⁸

10. In order to implement the Commission Radio-Off Principles set out in Order C-7-13, FortisBC submits that the following detailed criteria and processes should be applied with regard to FortisBC's Radio-Off Option (the **Radio-Off Option**).⁹ For ease of reference, FortisBC reproduces below key segments of the Application, together with references to certain responses to information requests filed in this proceeding.

⁸ Exhibit B-1 – FBC's Application at p. 2.

⁹ Exhibit B-1 – FBC's Application at p. 2.

A. Who Can Choose a Radio-Off AMI Meter?

11. Paragraph 1(a) of Order C-7-13 stipulates: “Customers may choose to opt-out of accepting a wireless transmission meter.” This section of FortisBC’s submissions addresses the criteria for identifying those persons eligible to participate in FortisBC’s Radio-Off Option in accordance with Order C- 7-13.

12. A customer for the purpose of the Radio-Off Option is a FortisBC account holder scheduled by FortisBC to receive an AMI meter.¹⁰ For clarity, property owners or residents who are not account holders are not eligible for the Radio-Off Option.¹¹

13. Given that the Radio-Off Option applies only to AMI implementation, FBC customers that are not scheduled by FortisBC to receive an AMI meter will not be eligible for the Radio-Off Option. These ineligible customers include large power customers currently billed using the MV-90 system, lighting customers and other non-metered customers.¹²

B. How Do Customers Choose the Radio-Off Meter?

14. Again, paragraph 1(a) of Order C-7-13 stipulates: “Customers may choose to opt-out of accepting a wireless transmission meter.” This section of FortisBC’s submissions sets out the process for customers to communicate that choice to participate in the Radio-Off Option to the Company.

15. A customer who wishes to participate in the Radio-Off Option and accept a radio-off AMI meter must communicate that choice to the Company by completing and signing an application form, in the form set out as Appendix “B” to the Application (the **FBC Radio-Off Option Form**) and delivering it to the Company by one of the following means:¹³

¹⁰ Exhibit B-1 – FBC’s Application at p. 2; Exhibit B-6 – FBC’s Response to BCSEA IR 1.2.1 at p. 2; Exhibit B-8– FBC’s Response to CSTS IR 1.1.1 to 1.1.3 at pp. 1 to 2.

¹¹ Exhibit B-5 – FBC’s Response to BCPSO IR 1.9.1 at p. 17.

¹² Exhibit B-1 – FBC’s Application at p. 2.

¹³ Exhibit B-1 – FBC’s Application at p. 3.

(a) delivering a hard copy of the completed and signed FBC Radio-Off Option Form to:

**FortisBC Electric Advanced Metering
Box 130,
1290 Esplanade,
Trail BC V1R 4L4**

(b) submitting a completed and signed FBC Radio-Off Option Form by fax to **866-540-6732**; or

(c) emailing a completed and signed FBC Radio-Off Option Form to fbcami@fortisbc.com.

16. A customer may obtain a copy of the FBC Radio-Off Option Form either online at FortisBC.com, or by calling FortisBC's electric Contact Centre at 1-866-436-7847 to have one mailed to them.¹⁴

17. No other forms or modes of communication constitute a valid means of communicating a customer's choice to participate in FortisBC's Radio-Off Option. To elaborate, only submission by one of the means specified above of a FBC Radio-Off Option Form, completed and signed by the account holder, will serve to enroll the customer in the Company's Radio-Off Option.¹⁵ Other forms of notification, such as, for example and without limitation, mass petitions, form letters, forms other than the FBC Radio-Off Option Form, emails, phone calls, or area-wide declarations will not be accepted.¹⁶

18. Further to paragraph 6, above, customers are not required to provide a reason for selecting the Radio-Off Option.¹⁷

¹⁴ Exhibit B-1 – FBC's Application at p. 3.

¹⁵ Exhibit B-1 – FBC's Application at p. 3 and Appendix C; Exhibit B-1-1 – FBC's Errata 1 to the Application; Exhibit B-6 – FBC's Response to BCSEA IR 1.10.1 at p. 13.

¹⁶ Exhibit B-1 – FBC's Application at p. 3.

¹⁷ Exhibit B-1 – FBC's Application at p. 3; Exhibit B-6 – FBC's Response to BCSEA IR 1.9.1 at p. 12.

19. Customers may elect to select the Radio-Off Option at any time, whether prior to, during, or following AMI implementation. There are no deadlines by which customers are required to select the Radio-Off Option.¹⁸

20. FortisBC will ensure that radio-off AMI meters are installed at every customer premise for which it has received a completed and signed FBC Radio-Off Option Form from the account holder for that premise.¹⁹ Customers who have completed, signed and submitted the FBC Radio-Off Option Form in the manner set out in the Application and herein are referred to in these submissions as **Radio-Off Option Customers**.²⁰

21. The initial fee described below will be included in the first bill that the Radio-Off Option Customer receives after installation of the radio-off AMI meter. Ongoing charges for manually reading the radio-off AMI meter will be included in each subsequent bill.²¹

C. How Will Customers Be Notified of the Radio-Off Option?

22. FortisBC has already delivered an AMI newsletter to all electric customers providing telephone and online contact information for those with questions or concerns about advanced meters. AMI information was also included in the September/October 2013 bill insert and FortisBC is continuously updating its website with AMI information.²² Customers who contact FortisBC will be made aware of the options available if their concerns cannot be addressed, including the Radio-Off Option if an AMI meter is scheduled by FortisBC to be installed at the premises associated with their account.²³ FortisBC contact centre staff will also arrange a face-to-face discussion with a FortisBC representative if such a meeting is requested by a concerned customer.²⁴

23. FortisBC maintains a database of all customer contacts (by phone, mail or email) pertaining to AMI. The purpose of the database is to enable the Company to contact all

¹⁸ Exhibit B-7 – FBC's Response to CEC IR 1.6.1 at p. 12; Exhibit B-6 – FBC's Response to BCSEA IR 1.6.1 at p. 8; Exhibit B-8 – FBC's Response to CSTS IR 4 to 5 at p. 2.

¹⁹ Exhibit B-1 – FBC's Application at p. 3 and Appendix C; Exhibit B-1-1 – FBC's Errata 1 to the Application; Exhibit B-6 – FBC's Response to BCSEA IR 1.10.1 at p. 13.

²⁰ Exhibit B-1 – FBC's Application at p. 3.

²¹ Exhibit B-1 – FBC's Application at p. 3 and Appendix C.

²² Exhibit B-7 – FBC's Response to CEC IR 1.5.1 to 1.5.2 at pp. 9 to 10.

²³ Exhibit B-1 – FBC's Application at p. 4; Exhibit B-6 – FBC's Response to BCSEA IR 1.12.1 at p. 16.

²⁴ Exhibit B-7 – FBC's Response to CEC IR 1.5.3 at p. 10.

noted customers prior to deployment of AMI meters at their premises in order to work through concerns and present alternatives available to customers, including the Radio-Off Option.²⁵

24. Thirty days prior to scheduled deployment of AMI meters to a particular region, the Company will mail a notice of pending AMI meter installation to all customers of the region. Included in that notice will be a general information kit regarding AMI, as well as a reminder that if customers have any concerns regarding the installation they need to contact FortisBC. The notice will clearly indicate that customers can select the Radio-Off Option, set out the means by which that choice must be communicated to FortisBC, and provide the fee schedule associated with that option.²⁶

25. The specific form of notice of the Radio-Off Option must necessarily await the Commission's decision. FortisBC has committed to complete it shortly after the decision.²⁷

26. Where it may alleviate customer concerns, information regarding the Radio-Off Option will be offered through the contact centre both during and after initial deployment of the AMI meters, to new customers as well as existing customers.²⁸

D. How Will Data Be Collected From the Radio-Off Meters?

27. Subparagraph 1(b) of Order C-7-13 stipulates: "Customers who choose to opt-out will be provided with an AMI meter that has the wireless transmit functions disabled. Transmit functions on these meters will remain disabled until the individual chooses to opt back in to the AMI program..." This section of the submissions addresses how the data from the radio-off AMI meter will be collected.

28. Since a radio-off AMI meter will have its transmitting functions disabled, consumption and operational data must be retrieved by FortisBC directly from the

²⁵ Exhibit B-4 – FBC's Response to BCUC IR 1.1.1 at p. 1.

²⁶ Exhibit B-1 – FBC's Application at p. 4.

²⁷ Exhibit B-7 – FBC's Response to CEC IR 1.5.2 at p. 9.

²⁸ Exhibit B-5 – FBC's Response to BCPSO IR 1.1.2 at p. 1; Exhibit B-6 – FBC's Response to BCSEA IR 1.12.1 at p. 16.

meter. The data will be securely retrieved by FortisBC personnel using a handheld device that will download the information through the optical port on the AMI meter.²⁹

29. FortisBC personnel are required to perform meter readings because they possess the requisite equipment to preserve the customer and system benefits of the AMI program.³⁰ Manual downloading of data by FortisBC personnel is in the best interest of all customers for the following reasons:³¹

- (a) it ensures the collection of hourly interval readings, which assist in energy balancing, thus helping to ensure revenue protection benefits (a key benefit of having radio-off AMI meters as opposed to electromechanical or ordinary digital meters);
- (b) it is most likely to result in accurate readings; and
- (c) it reduces radio-off fees, because AMI benefits are substantially preserved.

30. FortisBC will collect the same consumption and operational data for Radio-Off Option Customers and radio-on customers.³² This data includes interval data (hourly electricity use information), which provides customers and FortisBC with important benefits including:³³

- (a) improved customer usage information (hourly interval data helps customers understand when and why they are using electricity);
- (b) reduced electricity theft (synchronized hourly consumption data allows energy balancing to accurately detect electricity theft); and

²⁹ Exhibit B-1 – FBC’s Application at p. 4.

³⁰ Exhibit B-9 – FBC’s Response to RDCK IR 1.3 at p. 2.

³¹ Exhibit B-5 – FBC’s Response to BCPSO IR 1.2.1 to 1.2.2 at pp. 3 to 6.

³² Exhibit B-8 – FBC’s Response to CSTS IR 1.43 at p. 17. Note, however, that data capture under the Radio-Off Option will not be equivalent in frequency of collection and certain benefits of the AMI project will not be available to Radio-Off Option Customers. See Exhibit B-1 – FBC’s Application at pp. 4 to 5; Exhibit B-7 – FBC’s Response to CEC IR 1.3.4 at p. 7.

³³ Exhibit B-9 – FBC’s Response to RDCK IR 1.19 at pp. 9 to 10.

(c) reduced bill estimates (using daily interval data).

31. Meter readings and operational data will be downloaded at the period prescribed in the rate schedule under which the Radio-Off Option Customer receives electrical service.³⁴ Residential and small commercial customer meters are read on a bimonthly basis (once every two months).³⁵

32. A policy of reduced meter reading frequency with customer reading of meters some or all of the time would not be feasible or in the public interest, as significant security and cost issues would arise, including compromised theft reduction benefits, reduced safety and outage response benefits, bill estimation between meter reading periods, and less frequent customer access to hourly consumption data (reducing conservation effects).³⁶ This would negatively impact the theft-prevention and line loss benefits of the AMI program.³⁷

E. How Does the Radio-Off Option Affect Service to Radio-Off Option Customers?

33. For Radio-Off Option Customers, the radio-off AMI meters that the Company will install will provide interval consumption and event data.³⁸

34. While the deployment of radio-off AMI meters will protect the availability of some benefits that would not be available through the use of non-AMI meters, the decision of a customer to choose a radio-off AMI meter will still result in certain benefits being unavailable to the individual Radio-Off Option Customer:³⁹

(a) Radio-Off Option Customers will not receive their detailed consumption information on a near real-time basis;

³⁴ Exhibit B-1 – FBC’s Application at p. 4.

³⁵ Exhibit B-6 – FBC’s Response to BCSEA IR 14.1 to 14.2 at p. 20 to 21.

³⁶ Exhibit B-4 – FBC’s Response to BCUC IR 1.9.4 at pp. 30 to 31; Exhibit B-6 – FBC’s Response to BCSEA IR 14.2.1 at pp. 20 to 21.

³⁷ Exhibit B-6 – FBC’s Response to BCSEA IR 1.14.4.1 at p. 23.

³⁸ Exhibit B-1 – FBC’s Application at p. 4.

³⁹ Exhibit B-1 – FBC’s Application at pp. 4 to 5.

- (b) Radio-Off Option Customers will not have the benefit of remote outage detection and power quality monitoring;
- (c) Radio-Off Option Customers will not have the ability to participate in certain future innovative rates (for example, critical peak pricing and pre-pay rates) requiring reading of interval data more frequently than the manual download process allows;
- (d) Radio-Off Option Customers will not have support for a Home Area Network (**HAN**) and associated in-home displays (**IHDs**), given that this requires wireless transmission from the AMI meter.

35. FortisBC will endeavor to clearly communicate these limitations to customers in its notification to customers (referenced above) prior to deployment of AMI meters in their region.⁴⁰

F. What is the Incremental Cost That Will Be Charged to Radio-Off Option Customers?

(1) Overview

36. Subparagraph 1(c) of Order C-7-13 stipulates: “The incremental cost of opting-out of the AMI program will be borne by the individuals choosing to opt-out”.

37. The incremental cost to be charged to Radio-Off Option Customers will be comprised of the following:⁴¹

- (a) a per-premise setup fee of \$110 that recovers additional administrative and infrastructure costs associated with installation of a radio-off AMI meter.
- (b) a per-read fee of \$22 that recovers the cost of manually downloading the consumption and operational data from a radio-off meter.

⁴⁰ Exhibit B-1 – FBC’s Application at p. 5.

⁴¹ Exhibit B-1 – FBC’s Application at p. 5.

(2) Underlying Assumptions

38. As detailed below, certain underlying assumptions are used to calculate the per-premise and per-read fees.⁴²

(a) *Radio-Off Option Participation Rate*

39. The first assumption relates to the Radio-Off Option participation rate. FortisBC bases the per-read fee on a Radio-Off Option participation rate of 0.5%, based on the experience of similar programs in the U.S.;⁴³ this has also proven to be consistent with the Canadian experience. As to the former, as stated in the November 2012 issue of *Power Grid International*:⁴⁴

In practice, the number of customers who opt out of smart meters - fewer than 1 percent - confirms that most customers support having a smart meter or at least do not oppose it.

Customers in Maine, the state with the highest level of press coverage regarding the issue, are most active, with some 1.4 percent of customers opting out (about 8,000 customers of the 600,000 total). Here are some others reported recently:

- Avista Corp: zero percent
- Florida Power & Light Co.: 0.3 percent
- Lafayette Utilities System: 0.4 percent
- Pacific Gas & Electric Co.: 0.5 percent
- Portland Gas & Electric Co.: 0.0005 percent
- San Diego Gas & Electric Co.: 0.05 percent

The average of these, including Maine, is 0.4 percent - about 1 in 250 customers.

40. As to the Canadian experience, BC Hydro presented evidence with regard to its Meter Choice Program that Hydro Quebec has experienced a 0.2% opt-out participation rate.⁴⁵

⁴² Exhibit B-1 – FBC’s Application at p. 6.

⁴³ Exhibit B-1 – FBC’s Application at p. 6; Exhibit B-4 – FBC’s Response to BCUC IR 1.1.2 at pp. 1 to 2.

⁴⁴ Exhibit B-1 – FBC’s Application at p. 6; Exhibit B-2 – FBC Letter dated September 25, 2013 - Attachment A (‘Smart Meter Opt-out Policies Explained’ – Power Grid International) at p. 3.

⁴⁵ Exhibit B-4 – FBC’s Response to BCUC IR 1.1.2 at pp. 1 to 2.

41. The 0.5% estimate that FortisBC has used is a reasonable one, given that the data indicate a 0.4% average of opt-out participation rates amongst North American utilities (with a spread between 0% and 1.4%).⁴⁶ The 0.5% participation rate represents both a conservative estimate of fees and an accurate price signal for Radio-Off Option Customers.⁴⁷ FortisBC believes that the participation rate is unlikely to be significantly higher than 0.5%, and is more likely to be lower.⁴⁸

42. The 0.5% participation rate results in an estimate that 695 customers will participate in the Radio-Off Option.⁴⁹ As noted above, FortisBC maintains a database of customer contacts pertaining to AMI. Since the Commission's approval of the Company's AMI project, there have been 103 customer contacts pertaining to AMI (as of October 10, 2013).⁵⁰

43. While the participation rate is an underlying assumption, FortisBC forecasts that the manual meter cost per read (and thus the appropriate per read fee) would vary by \$5.00 per read or less from the \$22 fee proposed if the actual participation rate is in the range of 0.3% to 1.0%. The Company's forecast of the manual meter cost per read of various Radio-Off Option participation rates is as follows:⁵¹

Percent Opt Out	Cost / Read	Set-up Cost
0.1%	\$ 43	\$ 110
0.2%	\$ 32	\$ 110
0.3%	\$ 27	\$ 110
0.4%	\$ 24	\$ 110
0.5%	\$ 22	\$ 110
1.0%	\$ 17	\$ 110
1.5%	\$ 15	\$ 110
2.0%	\$ 14	\$ 110

⁴⁶ Exhibit B-4 – FBC's Response to BCUC IR 1.1.2 at pp. 1 to 2.

⁴⁷ Exhibit B-7 – FBC's Response to CEC IR 1.9.2 at pp. 23 to 24.

⁴⁸ Exhibit B-7 – FBC's Response to CEC IR 1.9.5 at pp. 24 to 25.

⁴⁹ Exhibit B-4 – FBC's Response to BCUC IR 1.1.2 at pp. 1 to 2.

⁵⁰ Exhibit B-4 – FBC's Response to BCUC IR 1.1.1 at p. 1.

⁵¹ Exhibit B-6 – FBC's Response to BCSEA IR 1.15.1 at p. 25; Exhibit B-4 – FBC's Response to BCUC IR 3 and Attachment 4.1.

44. The per-premise setup fee will remain unchanged at Radio-Off Option participation rates other than 0.5%.⁵²

(b) Travel Time

45. The second assumption underlying the calculation of per-premise and per-read fees is travel time. This input captures mobilization time and travel time between meter reading locations. It is assumed that the Radio-Off Option Customers are equally distributed over the Company's service territory, which provides an estimate of the minimum distance between reads (adjusted to account for the likelihood of indirect routes in most cases). Given an average travel speed between reads, this produces an average travel time for each read.⁵³

46. This assumption is reasonable given that the location and distribution of Radio-Off Option Customers is unknown at the present time. Where calculation of travel time requires estimation of input variables, FortisBC has selected conservative values. For example, FortisBC adjusted the minimum distance between reads by 10% to account for the fact that there will rarely be a straight route between two Radio-Off Option Customers.⁵⁴ FortisBC selected 30 km/h as a reasonable average travel speed which balances highway speeds utilized between rural locations of Radio-Off Option Customers with "near walking speeds" utilized in urban areas.⁵⁵

(c) Read Time

47. The third assumption underlying the calculation of per-premise and per-read fees is read time. The average time read required to download interval data manually from the AMI meter is estimated to be approximately 3 minutes.⁵⁶

48. This is a reasonable assumption based upon supplier estimates that the tasks involved (which are detailed below) can take from 3 to 5 minutes. FortisBC elected to

⁵² Exhibit B-6 – FBC's Response to BCSEA IR 1.15.1 at p. 25.

⁵³ Exhibit B-1 – FBC's Application at p. 6; Exhibit B-2 – FBC Letter dated September 25, 2013 – Electronic Attachment (Radio-Off Fee Derivation); Exhibit B-4 – FBC's Response to BCUC IR 1.8.1 at p. 27.

⁵⁴ Exhibit B-4 – FBC's Response to BCUC IR 1.8.1 at p. 27.

⁵⁵ Exhibit B-7 – FBC's Response to CEC IR 10.2.1 at pp. 26 to 27.

use the 3 minute estimate, which is consistent with its conservative approach to estimating fees applicable to the Radio-Off Option.⁵⁷

(3) Per-Premise Setup Fee

(a) Overview

49. The per-premise setup fee of \$110 includes an estimate of the following costs, which are required to reconfigure the AMI meter and to provide additional communication infrastructure to accommodate a Radio-Off Option Customer:⁵⁸

- (a) Approximately two hours per meter in administrative work required for manual meter configuration within the AMI system; and
- (b) Additional RF range extenders required to maintain the overall meter-to-range extender ratio in order to fill in network “gaps” created by the radio-off meters and preserve the integrity of the RF mesh. Range extenders are mounted on poles and serve to extend the communications range for LAN and limit the number of higher-cost collectors required.⁵⁹

50. The following table summarizes the inputs to the per-premise setup fee, the components of which are discussed in further detail below:⁶⁰

<u>Per-premise setup fee:</u>	units	rate	total per customer
Contact Centre	1	\$51.41	\$51.41
Metering Analyst	1	\$57.14	\$57.14
Capital related (add'l RE's)	2	\$707.00	\$2.12
Total			\$ 110.67
Proposed Per-premise setup fee:			\$110.00

⁵⁶ Exhibit B-1 – FBC’s Application at p. 6.

⁵⁷ Exhibit B-7 – FBC’s Response to CEC IR 1.11.1 at p. 28.

⁵⁸ Exhibit B-1 – FBC’s Application at p. 5; Exhibit B-8 – FBC’s Response to CSTS IR 1.10 at p. 4.

⁵⁹ Exhibit B-8 – FBC’s Response to CSTS IR 1.10 and 1.14 at pp. 4 to 6.

⁶⁰ Exhibit B-1 – FBCs Application at p. 5.

(b) Labour Costs (Per-Premise Setup Fee)

51. The \$110 per-premise setup fee per customer includes one hour of contact centre time at \$51.41 and one hour of metering analyst time at \$57.14 per hour.⁶¹ This subsection sets out the processes and calculations involved.

52. The hour of contact centre time is a conservative estimate of the time required for:⁶²

- (a) discussing AMI-related concerns with the customer;
- (b) preparing and printing or emailing information packages for the customer to review;
- (c) discussing options with the customer;
- (d) assisting customers with completion of the FBC Radio-Off Option Form; and
- (e) processing the FBC Radio-Off Option Form and forwarding the account to the meter analyst.

53. The hour of metering analyst time is a conservative estimate of the time required for:⁶³

- (a) receiving and reading the FBC Radio-Off Option Form;
- (b) searching the Customer Information System (CIS) to determine if an AMI meter is required at the premise, the type of AMI meter required at the premise, and to review the account notes (for meter access issues, previously noted customer concerns, etc.);
- (c) physically retrieving an AMI meter from inventory;

⁶¹ Exhibit B-1 – FBC's Application at p. 5.

⁶² Exhibit B-4 – FBC's Response to BCUC IR 1.5.3 at p. 16; Exhibit B-4-1 – FBC's Response to BCUC IR 1.5.2 Clarification at pp. 3 to 4.

- (d) connecting a laptop to the AMI meter and downloading security keys to the laptop;
- (e) driving to the premises;
- (f) at the AMI meter, plugging in a handheld tool connected to a laptop to the AMI meter, proceeding through a series of steps to disable the LAN radio, and downloading meter information to the laptop;
- (g) driving back to the FortisBC office; and
- (h) changing the customer meter configuration within the CIS system.

54. Due to inherent uncertainty in the contact centre and metering analyst time estimates, FortisBC proposes the following reconciliation process:⁶⁴

- (a) FortisBC will track actual meter analyst costs directly related to the activities described in paragraphs 52 and 53, above, starting November 1, 2013 and until the AMI project is complete;
- (b) Within three months of AMI project completion, FortisBC will file a report with the Commission detailing the meter analyst costs incurred and the number of Radio-Off Option meter installations;
- (c) If the sum of the average meter analyst and TCC costs per Radio-Off Option meter differs by more than \$5 from the estimate in this Application (excluding range extender costs), FortisBC will adjust the fees as follows:
 - (i) If the actual average cost is less than the estimated cost by more than \$5, FortisBC will retroactively refund the difference, with interest, to Radio-Off Option Customers and adjust the tariff rate to the actual average cost on a go-forward basis;

⁶³ Exhibit B-4 – FBC's Response to BCUC IR 1.3.1 at p. 6 to 7; Exhibit B-4-1 – FBC's Response to BCUC IR 1.3.1 Clarification at pp. 1 to 3.

⁶⁴ Exhibit B-4-1 – FBC's Response to BCUC IR 1.3.1 and 1.5.3 Clarification at pp. 1 to 4.

- (ii) If the actual average cost is more than the estimated cost by more than \$5, FortisBC will adjust the tariff rate to the actual average cost on a go-forward basis. For clarity, FortisBC does not intend to retroactively charge Radio-Off Option Customers for these additional costs.

55. The per unit or hourly labour rates for contact centre time at \$51.41 per hour and metering analyst time at \$57.14 per hour for 2016 include incremental labour related costs (including benefit loading to account for vacation, statutory holidays, and other time away; pension, medical, dental and other health benefits; and WCB and other labour related costs).⁶⁵

(c) Capital Costs (Per-Premise Setup Fee)

56. The \$110 per-premise setup fee also includes a capital related component of \$2.12 for RF range extenders⁶⁶ to address the incremental impact of Radio-Off Option Customers on the RF-mesh. This subsection explains the need for these additional RF range extenders and how their cost has been estimated.

57. When a premise becomes radio-off, a “hole” in the RF-mesh may be created, requiring additional communications infrastructure in order for the AMI system to operate correctly. It is not possible to determine the location or impact of those “holes” prior to installation and configuration of the radio-off AMI meter.⁶⁷

58. FortisBC intends to construct the RF-mesh as if all customers are accepting standard radio-on AMI meters. This ensures that regardless of when a premise becomes radio-on, it will be able to communicate automatically with the AMI system, limiting work and costs which would otherwise be required to continuously modify the RF-mesh.⁶⁸

⁶⁵ Exhibit B-7 – FBC’s Response to CEC IR 1.8.2 at pp. 15 to 16; Exhibit B-2 – FBC Letter dated September 25, 2013 – Electronic Attachment (Radio-Off Fee Derivation).

⁶⁶ Exhibit B-1 – FBC’s Application at p. 5.

⁶⁷ Exhibit B-4 – FBC’s Response to BCUC IR 1.11.1 at p. 34.

⁶⁸ Exhibit B-4 – FBC’s Response to BCUC IR 1.11.1 at p. 34.

59. The Company's forecast of the cost of additional communications infrastructure required is based upon an extrapolation of the range extender to meter ratio (0.3%) of the entire AMI system over the forecast number of radio-off premises (695 premises x 0.3% = 2.1).⁶⁹ The cost of the forecast two RF range extenders required is then divided by the anticipated number of Radio-Off Option Customers to arrive at the per-premise setup fee capital related component of \$2.12.⁷⁰

60. The per unit capital related cost of \$707.00 includes the RF range extender cost per unit of \$187.00 and the RF range extender installation cost per unit of \$520.00.⁷¹ These figures include incremental capital related costs (including capitalized overhead loading to account for indirect costs).⁷²

61. The RF range extenders are the sole component of the capital related costs included in the per-premise setup fee.⁷³

(4) Per-Read Fee

(a) Overview

62. The per-read fee of \$22 covers all incremental vehicle and labour costs incurred for the ongoing manual download process, as discussed in further detail below.⁷⁴

63. The per-read fee will be charged for each meter reading at the period prescribed in the applicable rate schedule. Residential, small commercial and irrigation customers' meters are read on a bimonthly basis (once every two months), whereas commercial and large commercial customers have their meters read on a monthly basis.⁷⁵

64. The following table summarizes the inputs to the per-read fee:⁷⁶

⁶⁹ Exhibit B-4 – FBC's Response to BCUC IR 1.11.1 at pp. 34 to 35.

⁷⁰ Exhibit B-1 – FBC's Application at p. 5; Exhibit B-2 – FBC Letter dated September 25, 2013 - Electronic Attachment (Radio-Off Fee Derivation).

⁷¹ Exhibit B-2 – FBC Letter dated September 25, 2013 - Electronic Attachment (Radio-Off Fee Derivation); Exhibit B-7 – FBC's Response to CEC IR 1.8.3.1 at p. 16.

⁷² Exhibit B-7 – FBC's Response to CEC IR 1.8.2 at pp. 15 to 16.

⁷³ Exhibit B-1 – FBC's Application at p. 5; Exhibit B-2 – FBC Letter dated September 25, 2013 - Electronic Attachment (Radio-Off Fee Derivation); Exhibit B-7 – FBC's Response to CEC 1.8.3 at p. 16.

⁷⁴ Exhibit B-1 – FBC's Application at p. 6; Exhibit B-8 – FBC's Response to CSTS IR 1.19 at p. 8.

⁷⁵ Exhibit B-6 – FBC's Response to BCSEA IR 1.14.1 at pp. 19 to 20.

⁷⁶ Exhibit B-1 – FBC's Application at p. 7. See also Exhibit B-7 – FBC's Response to CEC IR 1.1.3 at p. 2.

Ongoing Costs (per read):

Number of customers (2016)	138,900
Radio-off option rate	0.50%
forecast Radio-Off Customers	695

Read time	3 min
Travel time	13 min
<u>Total time per read</u>	<u>16 min</u>

Cost per minute calculation:

Labour	\$ 0.99
Vehicle	\$ 0.40
Total	\$ 1.39

<u>Cost per read</u>	<u>\$ 22.81</u>
Proposed Cost per read	\$22.00

(b) Labour Costs (Per-Read Fee)

65. The \$22 per-read fee includes labour components for both a read time of 3 minutes and a travel time of 13 minutes at \$0.99 per minute.⁷⁷ This subsection sets out the processes and calculations involved.

66. The read time of 3 minutes is a conservative estimate, based upon supplier estimates, of the time required for:⁷⁸

- (a) exiting the vehicle and obtaining access to the radio-off meter;
- (b) opening and logging on to the laptop;
- (c) connecting the laptop to the radio-off meter via the handheld device;
- (d) logging on to the radio-off meter;
- (e) initiating download;
- (f) synchronizing the radio-off meter clock (because the radio-off meter is not connected to the AMI system, its clock must be synchronized at each manual download);

⁷⁷ Exhibit B-1 – FBC’s Application at p. 7.

- (g) disconnecting; and
- (h) returning to the vehicle.

67. The estimated travel time of 13 minutes includes 2 minutes for mobilization time and 11 minutes of travel between read times.⁷⁹ The estimated travel between read times is based upon a travel speed of 30 km/h and on the service territory area per customer, conservatively adjusted to account for the fact that there will rarely be a straight route between two Radio-Off Option Customers.⁸⁰

68. The labour rate of \$0.99 per minute is derived from an estimated \$59.57 hourly rate for a FortisBC customer service person (**CSP**) for 2016, as servicing and manually reading an AMI meter requires skill sets that approximate those of the existing customer service person role.⁸¹ These labour rates include benefit loading to recover costs including vacation, statutory holidays, and other time away; medical, dental and pension costs; and WCB and other labour related costs.⁸²

(c) Vehicle Costs (Per-Read Fee)

69. The \$22 per-read fee also includes a vehicle component for travel time of 13 minutes at \$0.40 per minute.⁸³ This subsection sets out the processes and calculations involved.

70. The basis for the estimate of 13 minutes of travel time is set out above.⁸⁴

71. The \$0.40 per minute estimate of vehicle costs is derived from an hourly vehicle rate of \$23.95 for 2016.⁸⁵ That hourly vehicle rate is developed by dividing vehicle

⁷⁸ Exhibit B-7 – FBC’s Response to CEC IR 1.11.1 at p. 28.

⁷⁹ Exhibit B-2 – FBC Letter dated September 25, 2013 – Electronic Attachment (Radio-Off Fee Derivation).

⁸⁰ Exhibit B-4 – FBC’s Response to BCUC IR 1.8.1 at p. 27. See also Exhibit B-7 – FBC’s Response to CEC IR 10.2 to 10.2.1 at pp. 26 to 27.

⁸¹ Exhibit B-2 – FBC Letter dated September 25, 2013 – Electronic Attachment (Radio-Off Fee Derivation); Exhibit B-4 – FBC’s Response to BCUC IR 1.7.1 to 1.7.2.1.1 at pp. 24 to 25; Exhibit B-7 – FBC’s Response to CEC IR 1.12.2 at p. 32.

⁸² Exhibit B-7 – FBC’s Response to CEC IR 1.12.2 at p. 32.

⁸³ Exhibit B-1 – FBC’s Application at p. 7.

⁸⁴ See also Exhibit B-4 – FBC’s Response to BCUC IR 1.8.1 at p. 27; Exhibit B-7 – FBC’s Response to CEC IR 10.2 to 10.2.1 at pp. 26 to 27.

expenses by total actual charged out hours for the vehicle class, and then adding cost recovery components including financing costs, building insurance cost and property tax.⁸⁶

72. The 2016 hourly vehicle rate components are as follows:⁸⁷

Components	Cost	Hourly Rate (2013)	Hourly Rate (2016)	Minute Rate
Insurance	\$ 12,069	\$ 1.73	\$ 1.82	\$ 0.03
Maintenance	\$ 44,462	\$ 6.36	\$ 6.71	\$ 0.11
Lease costs	\$ 44,691	\$ 6.39	\$ 6.74	\$ 0.11
Fuel	\$ 51,160	\$ 7.31	\$ 7.72	\$ 0.13
Other	\$ 6,416	\$ 0.92	\$ 0.97	\$ 0.02
Vehicle Rate (2016)	\$ 158,798	\$ 22.70	\$ 23.95	\$ 0.40

(5) Customers Where WAN Uneconomic

73. As was noted in the AMI CPCN application, and as will be finalized during the Define/Design stage of the AMI Project, the Company has considered that up to one percent of customers may not have an economic Wide Area Network (**WAN**) solution available to them, resulting in the installation of radio-off AMI meters that have to be serviced via a continuation of manual meter reading to those specific locations. Providing manual meter reading as a WAN solution in these cases involves certain costs that were built into the AMI Project proposal and financial analysis. The radio-off fees proposed herein as applicable to the Radio-Off Option are designed to cover only those costs that are incremental to the costs already considered for the WAN-related manual meter reading.⁸⁸

(6) False Site Visit Charge

74. In addition to the above fees, FortisBC may apply a False Site Visit Charge as specified in Schedule 80 of the Tariff in cases where the Company attends a customer property at the request of the customer, but is unable to install a radio-off AMI meter

⁸⁵ Exhibit B-2 – FBC Letter dated September 25, 2013 - Electronic Attachment (Radio-Off Fee Derivation).

⁸⁶ Exhibit B-4 – FBC's Response to BCUC IR 1.6.1 to 1.6.2 at pp. 19 to 21.

⁸⁷ Exhibit B-4 – FBC's Response to BCUC IR 1.6.1.1 at pp. 19 to 20; Exhibit B-7 – FBC's Response to CEC IR 1.12.4 at p. 33.

⁸⁸ Exhibit B-1 – FBC's Application at p. 7; Exhibit B-6 – FBC's Response to BCSEA IR 1.7.1 and 1.7.3 at pp. 9 and 10.

because the customer refuses access to their property or creates conditions that prevent the Company from installing a radio-off AMI meter.⁸⁹

G. Financial Treatment and Adjustment Mechanism

75. The revenue received from radio-off fees will be forecast and recorded as “Other Income” similar to other tariff fees. These revenues will be offset by increased O&M costs. The net result will be a forecast zero rate impact.⁹⁰

76. For clarity, the Radio-Off Option fees received will not increase rate base and will only offset the incremental costs of the Radio-Off Option incurred by FortisBC (only the capital cost of additional range extenders will affect rate base).⁹¹ To ensure that the fees in fact reflect incremental costs, the Company intends to track the costs associated with the items which comprise the fees (specifically costs related to manual downloading, meter analysts, range extenders and the contact centre) as well as any unanticipated costs or costs which were expected to be immaterial.⁹²

77. FortisBC will monitor both actual numbers of Radio-Off Option Customers and actual manual meter reading costs, as detailed above.⁹³ The Company will recommend fee revisions during the next Cost of Service/Rate Design Application if appropriate.⁹⁴ Assuming full deployment of AMI by the end of 2015, FortisBC could perform a full cost of service study as early as 2017.⁹⁵

78. The actual number of Radio-Off Option Customers and actual costs would likely not be known until after full implementation of the AMI project, so the earliest feasible

⁸⁹ Exhibit B-1 – FBC’s Application at p. 7; Exhibit B-6 – FBC’s Response to BCSEA IR 1.1.1 to 1.18.2 at pp. 31 to 32.

⁹⁰ Exhibit B-1 – FBC’s Application at p. 7.

⁹¹ Exhibit B-6 – FBC’s Response to BCSEA IR 1.16.4 at p. 27; Exhibit B-7 – FBC’s Response to CEC IR 1.13.4 at pp. 36 to 37. The capital cost of additional range extenders will constitute a minor increase to rate base.

⁹² Exhibit B-4 – FBC’s Response to BCUC IR 1.10.2 to 1.10.2.1 at p. 32 to 33.

⁹³ See also Exhibit B-4-1 – FBC’s Response to BCUC IR 1.3.1 and 1.5.3 Clarification at pp. 1 to 4.

⁹⁴ Exhibit B-1 – FBC’s Application at p. 7.

⁹⁵ Exhibit B-4 – FBC’s Response to BCUC IR 1.10.1 at p. 32; Exhibit B-5 – FBC’s Response to BCPSO IR 1.5.2 at p. 11.

time for completing a revision of Radio-Off Option fees is in the next Cost of Service/Rate Design Application.⁹⁶

79. Again, as was noted in the AMI CPCN application, and as will be finalized during the Define/Design stage of the AMI Project, the Company has considered that up to one percent of customers may not have an economic WAN solution available to them, resulting in the installation of radio-off AMI meters that have to be serviced via a continuation of manual meter reading. It is not proposed that these customers be subject to the radio-off AMI meter costs noted above as:⁹⁷

- (a) By definition, these customers are being served by manual meter reading as a last option only due to technical or economic drivers limiting the extension of the RF mesh to their premise; and
- (b) As technological or economic conditions warrant, the Company will convert the meters to standard radio-on AMI meters (the meters' radio will be turned on) and consumption and event data will be transmitted to FortisBC via a fixed communications network. As meters are converted, manual meter reading to those locations will be eliminated.

H. What Happens When a Radio-Off Option Customer Chooses a Standard AMI Meter (Radio-On)?

80. Paragraph 1(b) of Order C-7-13 stipulates: "Customers who choose to opt-out will be provided with an AMI meter that has the wireless transmit functions disabled. Transmit functions on these meters will remain disabled **until the individual chooses to opt back in to the AMI program...**" (emphasis added). This section of the submissions addresses the process by which an individual eligible to do so communicates to the Company his or her choice to opt back in to the AMI program.

⁹⁶ Exhibit B-5 – FBC's Response to BCPSO IR 1.5.2 at p. 11.

⁹⁷ Exhibit B-1 – FBC's Application at p. 8; Exhibit B-6 – FBC's Response to BCSEA IR 1.7.1 at p. 9.

81. A Radio-Off Option Customer may decide to revert to the standard radio-on AMI meter option at any time by calling the FortisBC electric Contact Centre at 1-866-436-7847 or emailing FortisBC at fbcami@fortisbc.com and advising of his or her decision.⁹⁸

82. Once the Company receives notice of the customer's decision to stop participating in the Company's Radio-Off Option, FortisBC will dispatch a meter technician to complete a final manual meter read, and to enable the AMI meter's radio. The customer will incur one final per-read fee.⁹⁹

83. Enabling the AMI meter's radio requires a laptop with appropriate configuration software to be linked to the meter using a handheld tool. Once the AMI meter is active, the AMI meter will automatically join the AMI network, register with the HES and MDMS software and begin transmitting meter readings.¹⁰⁰ The cost of enabling the AMI meter is captured by the final per-read fee for the final manual meter read; no other material costs associated with radio enablement are expected.¹⁰¹

I. What Happens When a Radio-Off Option Customer Moves From the Property?

84. Again, paragraph 1(b) of Order C-7-13 stipulates: "Customers who choose to opt-out will be provided with an AMI meter that has the wireless transmit functions disabled. Transmit functions on these meters will remain disabled until the individual chooses to opt back in to the AMI program; in the event that the customer moves from the property, the opt-out choice will move with the customer". This section of the submissions addresses what happens when a Radio-Off Option Customer moves.

85. There are two elements to consider in this regard: (a) what happens at the Radio-Off Option Customer's new premises; (b) what happens at the Radio-Off Option Customer's former premises, at which a radio-off meter had earlier been installed?

⁹⁸ Exhibit B-1 – FBC's Application at p. 8.

⁹⁹ Exhibit B-1 – FBC's Application at p. 8.

¹⁰⁰ FBC's Response to BCUC IR 1.4.1 at p. 12.

¹⁰¹ FBC's Response to BCUC IR 1.4.1.1 at pp. 12 to 13.

86. Ongoing post-AMI deployment, it will be FortisBC's standard operating procedure that, when a Radio-Off Option Customer moves, they will be asked to confirm their choice for a radio-off meter at their new premises (if in FortisBC service territory), and if confirmed, to submit a signed FBC Radio-Off Option Form specific to the new premises. Customers will pay a fee for the final read at the old premises, and the applicable per-premise setup and per-read radio-off fees for the new premises. The fee at the new residence will be the per-premise setup fee noted above, \$110. These fees relate to the cost of manually turning off the radio at the new premises, configuring the system to accept manual reads at the new premise, ensuring that the RF-mesh network continues to operate around the new radio-off location, and manually turning on the radio at the old premises.¹⁰²

87. Because the radio-off choice moves with the customer, it no longer applies to that customer's former premises. FortisBC will turn the wireless transmission "on" at that premises until a new, incoming customer at the premise also elects to choose a radio-off AMI meter, and completes, signs, and submits the FBC Radio-Off Option Form in the manner outlined above.¹⁰³ If the new customer registers for the Radio-Off Option prior to FortisBC changing the meter to the default radio-on mode, the new customer will not be charged the per-premise setup fee.¹⁰⁴

J. Tariff Changes

88. In order to accommodate the Radio-Off Option, FortisBC's existing Electric Tariff has been updated to include a Radio-Off Option Rate Schedule that sets out the terms applicable to the Radio-Off Option Customer's decision to choose a radio-off AMI meter to be installed at their premises, as well as detail on the fees to be charged to recover the costs associated with that choice. The new Rate Schedule 81 and associated changes to FortisBC's Electric Tariff Terms and Conditions were attached to the Application as Appendix "C".¹⁰⁵

¹⁰² Exhibit B-1 – FBC's Application at p. 9. See also Exhibit B-9 – FBC's Response to RDCK IR 1.32 at pp. 14 to 15; Exhibit B-6 – FBC's Response to BCSEA IR 1.13.2 at p. 17.

¹⁰³ Exhibit B-1 – FBC's Application at p. 9.

¹⁰⁴ Exhibit B-5 – FBC's Response to BCPSO IR 1.6.1 and 1.6.4 at pp. 12 to 13.

¹⁰⁵ Exhibit B-1 – FBC's Application at p. 9.

89. FortisBC has filed an erratum to the new Rate Schedule 81 proposed in the Application so as to clarify the exact process required for a customer to select the Radio-Off Option.¹⁰⁶

K. Other

90. For those customers that still wish to have a standard radio-on AMI meter, but have concerns related to the wireless communication capabilities of the meter, there remains the option¹⁰⁷ of relocating the meter base to a location mutually acceptable to the customer and the Company, with the customer responsible for all costs related to the relocation.¹⁰⁸

91. Meter relocation is not a part of the Application, as the meter relocation process is available under the existing Tariff.¹⁰⁹ If requested by the customer, FortisBC will disconnect and reconnect service in order to facilitate the meter base relocation, which the customer performs at their expense.¹¹⁰ FortisBC charges standard tariff fees for service disconnection and reconnection, as set out in Schedule 80 of FortisBC's Electric Tariff.¹¹¹ The meter base relocation is performed by qualified electricians hired and paid by the customer.¹¹²

¹⁰⁶ Exhibit B-1-1 – FBC's Errata 1 to the Application.

¹⁰⁷ As stated in Section 8.5 of FortisBC's Application for a CPCN for the AMI Project (Exhibit B-1).

¹⁰⁸ Exhibit B-1 – FBC's Application at p. 9.

¹⁰⁹ Exhibit B-5 – FBC's Response to BCPSO IR 1.7.1 at p. 14.

¹¹⁰ Exhibit B-7 – FBC's Response to CEC IR 1.14.1 at p. 38; Exhibit B-5 – FBC's Response to BCPSO IR 1.7.1 at p. 14.

¹¹¹ Exhibit B-7 – FBC's Response to CEC IR 1.14.2 at p. 38.

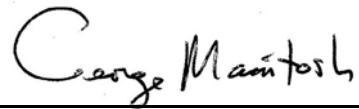
¹¹² Exhibit B-5 – FBC's Response to BCPSO IR 1.7.1 at p. 14.

PART III - CONCLUSION

92. In all the circumstances, FortisBC requests that the Commission approve the fees and process for the Radio-Off AMI Meter Option as filed in the Application, including the errata thereto, and further described in these submissions.¹¹³

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Counsel for FortisBC Inc.:



George K. Macintosh, Q.C.



Ludmila B. Herbst

Dated: November 6, 2013

¹¹³ Exhibit B-1 – FBC’s Application; see also Exhibit B-1-1 – FBC Errata 1 to the Application.