

REQUESTOR NAME: BCPSO
INFORMATION REQUEST ROUND NO: 2
TO: BRITISH COLUMBIA HYDRO & POWER AUTHORITY
DATE: December 20, 2013
APPLICATION NAME: Application for Approval of Charges Related to Meter Choices Program

**1.0 Reference: BCUC 1.1.2.2
BCUC 1.21.1
BCPSO 1.1.1**

- 1.1 During the smart meter installation program that began in July 2011, was a failed installation fee levied against residential and/or commercial customers when access was denied and/or obstructed?
- 1.2 If not, why is it appropriate to institute one now when there are only 60,000 customers without smart meters?
- 1.3 How have the costs incurred to date that are associated with failed installations been treated?
- 1.4 How have/will the failed installation costs that have been incurred to date be recovered? More specifically, will customers who incur the new failed installation charge also be responsible for paying a portion of the costs incurred during the smart meter implementation for failed installations?

2.0 Reference: BCUC 1.1.5

- 2.1 Will the customers included under the first and second listed “underlying causes for...meter installations that have not been completed” (i.e., “unable to access” and “permanent obstruction”) now be subject to a failed installation fee if the problem continues to exist when future visits occur?
- 2.2 Is it BC Hydro’s expectation that customers will resolve “permanent obstruction” issues regardless of the cost?

3.0 Reference: BCUC 1.2.4

- 3.1 Please explain fully how the customer’s average monthly consumption and resulting monthly bill will impact the relative price of the radio-off and legacy meter options as stated in the first sentence of the response.

4.0 Reference: BCUC 1.6.5.2

- 4.1 If participation declines in the future will fewer range extenders and (theft) check meters be required?

- 4.2 The response to the interrogatory suggests that the costs of redundant range extenders, check meters and other equipment will be recovered from the customers still remaining in the Meter Choice Program. Please confirm if this is the case.
- 4.2.1 If not, how will they be recovered?
- 4.2.2 If yes, why is this appropriate?
- 4.3 Were there remaining costs (amortization, finance charges, etc.) associated with those legacy meters that have been replaced by smart meters to date under BC Hydro's smart meter implementation program?
- 4.3.1 If yes, how are these costs to be recovered and will they be recovered from customers who have opted (under the Meter Choices Program) to retain their legacy meters.
- 5.0 Reference: BCUC 1.6.5.3**
- 5.1 From which customers does BC Hydro expect the costs recorded in the SMI Regulatory Account to be recovered?
- 6.0 Reference: BCUC 1.7.1**
- 6.1 Given BCUC cost of capital exceeds the rate inflation is there not some economic value to BC Hydro when the installation of smart meters is delayed?
- 6.2 For those premises where smart meters have been installed to date, were all smart meters installed on the first visit or were two (or more) visits required to some premises?
- 6.2.1 If some premises required two or more visits, how have/will the costs of the extra visits be recovered by BC Hydro?
- 7.0 Reference: BCUC 1.9.5
BCPSO 1.13.1**
- 7.1 Given that only 20 check meters were in use prior to the deployment of smart meters, please explain more fully why 5,000 customers retaining legacy meters gives rise to the need for 300 additional check meters.
- 8.0 Reference: BCUC 1.14.1
Exhibit B-1, page 3-6 and pages 3-14 to 3-15**
- 8.1 Please confirm that in cases where a customer moves to another premise (page 3-6, lines 15-18) and requests a radio-off meter, a technician will have to visit the new premise and exchange the existing smart meter for a radio-off meter.
- 8.2 How much of the estimated \$55 cost for this exchange is associated with the time actually required (at the premise) to exchange the meters.

8.3 If the time to reactivate a radio-off meter is relatively small (per page 3-15), why is the full cost of exchanging an existing legacy meter for a smart meter used as the cost for exit fee cost?

**9.0 Reference: BCUC 1.19.4.3
BCPSO 1.1.1
CSTS 1.25 and CSTS 1.44
Exhibit B-1, pages 3-5 and 3-20**

9.1 Are the 21,000 Non-WAN accounts included in the difference between the total number of metered premises and the number of eligible premises (BCPSO 1.1.1 parts a) & b))?

9.2 If not, where in the BCPSO 1.1.1 (parts c to e) breakdown of the 1,827,000 eligible premises are they reflected?

9.3 What types of meters will be used in the 21,000 Non-WAN accounts (Standard Smart Meters or Radio-Off Smart Meters)?

9.4 Are any of the activities associated with the capital or operating costs set out in Table 3-3 required to support the 21,000 Non-WAN accounts?

9.4.1 For those activities that are not required to support the Non-WAN accounts – please explain why they are not required.

9.4.2 For those activities that are required to support the Non-Wan accounts (apart from Meter Reading costs) please explain how the costs attributable to the Meter Choices Program were distinguished from the costs associated with the Non-WAN accounts.

9.4.3 In particular, will any of the information technology and IT maintenance costs incurred be for the non-WAN accounts and, if so, how has this been factored into the analysis?

9.4.4 Please confirm that, in the case of Meter Reading costs, the costs attributed to the Meter Choices Program are not incremental costs (i.e., the additional costs that would be incurred over and above those required for the Non-WAN accounts) but rather a pro-rata allocation of total costs.

10.0 Reference: BCUC 1.20.1

10.1 Have the proposed charges changed as a result of the correction noted in BCUC 1.17.1? If so, what are they and how were they derived from the updated numbers?

**11.0 Reference: BCPSO 1.1.1
Exhibit B-8, Enrollment Status**

11.1 The response to BCPSO 1.1.1 indicated there were 55,000 on hold and another 12,000 where installation had not been completed for some other reason,

suggesting there were 67,000 customers eligible for the Meter Choices Program. However, Exhibit B-8 suggests there were 68,078. Please reconcile the two.

12.0 Reference: BCPSO 1.5.1

12.1 With respect to the revenues and costs associated with the Meter Choices Program please clarify exactly what the difference is between the treatment as suggested in the question and that described in the answer that led to the “not confirmed” response.

**13.0 Reference: BCPSO 1.6.1
RDCK 1.19.0**

13.1 Does BC Hydro intend to perform energy balance analysis for all customers for each 2 month billing period? If not, what is the anticipated frequency at which electricity balance analysis requiring specific customer’s usage data will be performed?

**14.0 Reference: BCPSO 1.8.1.1
Exhibit B-8, Enrollment Status**

14.1 How many of the 48,692 legacy meters that have been replaced with smart meters or radio off meters as part of the Meter Choices Program were suitable to be placed in inventory?

15.0 Reference: BCPSO 1.9.1

15.1 Other than the fact the proposed tariff wording precludes it, no reason was given in the response. Why, if there is currently a legacy meter at the new premise, can’t a customer who currently has a legacy meter have the legacy meter at the new premise retained?

**16.0 Reference: BCPSO 1.11.1 and 1.11.3
BCSEA 1.9.6**

Preamble: BCSEA 1.9.6 explains why, when a radio-off meter must be installed in any event, it is more efficient to process the meter to be radio-off prior to travelling to the customer’s premise and performing the installation. However, BCPSO 1.11.1 addresses a different situation where the smart meter is already in place.

16.1 Is it still more cost-effective to remove the existing smart meter and replace it with a radio-off meter than to just update the firmware and the associated configuration change in-field and therefore not have to incur any removal/installation costs? Please provide a cost comparison of the two approaches.

**17.0 Reference: BCPSO 1.18.1
Exhibit B-1, page 3-17, Table 3-11**

17.1 Please confirm that the costs associated with the replacing legacy meters with other legacy meters at the time of seal expiry (per Table 3-11) are included in the monthly charge.

17.1.1 If confirmed, then won't a customer migrating away from the legacy meter option at the time of seal expiry have paid rates that include these costs up to that point in time even if the customer then opts not to have the meter exchanged for another legacy meter?

18.0 Reference: BCPSO 1.21.4

Preamble: The question did not ask if the current Collection Charge was representative of the current cost of attendance at a customer's premise to install a meter, as suggested by the response.

18.1 Please explain why the Collection Charge is not representative of the cost of making a trip to the customer's premise but then not actually performing any work on-site.

19.0 Reference: BCSEA 1.6.3

19.1 What types of meters have been installed to date on Non-WAN accounts?

20.0 Reference: Exhibit B-1, Appendix A Smart Meters and Smart Grid Regulation

Prescribed requirements for smart meters

2 For the purposes of the definition of "smart meter" in section 17 (1) of the Act, the prescribed requirements for a meter are that it is capable of doing all of the following:

...

(c) allowing the authority remotely to disconnect and reconnect the supply of electricity to an [sic] eligible premises, unless

(i) the point of metering for the eligible premises

- (A) is greater than 240 volts,
- (B) is greater than 200 amperes, or
- (C) is three phase, or

(ii) the eligible premises

- (A) has a bottom-connected meter,
- (B) has an output or input pulse meter, or
- (C) has a meter that measures maximum electricity demand in watts.

21.1 Please explain the reasons for the exclusions of the six categories listed above.

21.2 How many of BC Hydro's customers who take service under a residential tariff fall into the above six categories?

**21.0 Reference: CEC 1.7.1, Attachment 1, page 6
CEC 1.39.7**

21.1 Please confirm that for customers with radio-enabled smart meters, disconnections and re-connections can be performed without visiting the premise.

21.2 Please confirm that re-connection charges will only apply to customers with radio-off and legacy meters.

21.3 Does BC Hydro plan to reduce or eliminate the reconnection charges applicable to customers with radio-enabled smart meters?

22.0 Reference: CEC IR 1.7.1 Attachment 1, p.24

Preamble: At page 24 of the Business Case attached to their Response to CEC IR 1.7.1, BC Hydro sets out the Benefit Description, the Present Value (PV) in \$ Millions (M), the Key Business Case Assumptions, and the Sensitivity in \$Millions (M).

Remote Re-connect Automation

Benefit Description

Today, meter reconnections and disconnections are completed onsite by a meter technician or power line technician. The remote on/ off switch provided within smart meters enables all connection related services to be completed remotely, safely and securely.

This benefit is due to reducing the need for manual connects/disconnects for nonpayment, and the associated vehicle expenses.

Present Value (PV) in \$ Millions (M)

\$47 M. Range is: \$42 M–\$52 M

Key Business Case Assumptions

BC Hydro's policies and procedures for when service can and will be disconnected are not changed for this business case.

Remote on/off switch will be included in all meters where it is technically feasible.

Sensitivity in \$Millions (M)

Each percentage point over 95 per cent coverage adds \$0.23 M to the PV.

22.1 With regard to the "remote on/off switch," please answer the following:

22.1.1 In how many installations to date has it proved not technically feasible to install a remote on/off switch?

22.1.2 Please provide reasons why installation of the remote on/off switch was not technically feasible, as well as the number of installations affected for each reason.

22.2 With regard to the Working Model:

22.2.1 Please provide the model in support of the \$47 million NPV and a list of all financial and operating assumptions (including, but not limited to, the annual volume of connections and reconnections performed remotely and manually) used to develop the NPV. In particular please identify separately the reason for each connection and reconnection (i.e., new service, non-payment etc.).

22.3 With regard to manual connects/disconnects for nonpayment, please provide the following information:

22.3.1 Please provide details of the number of manual connects/disconnects for nonpayment that have occurred in the five fiscal years ended March 31, 2013 by BC Hydro district, together with the amount of revenue garnered from this source.

22.3.2 Please provide details of the number of instances where the reconnection fee following nonpayment was waived, if any, during this period.

23.0 Reference: Exhibit B-6-1, Response to BCSEA IR 1.2.4.1, BC Hydro policy disconnects for nonpayment and reconnection

Preamble: BC Hydro states that:

“Customers who do not pay their bills, either in full or in part, will enter the existing non-payment process and will eventually be disconnected if their account continues to be in arrears. Per the existing non-payment process, customers receive multiple reminders and phone calls prior to disconnection. The degree of contact and time allowed before issuing a disconnection order varies by the customer’s credit rating and the amount of the arrears”.

23.1 Please provide a copy of BC Hydro’s current policy that covers the “existing non-payment process”.

23.2 Please identify any (major) amendments, revisions etc. made in the past 5 years.

24.0 Preamble: In the 2007 RDA, BC Hydro stated the following (Exhibit B-3, BCUC 1.49.1 in that proceeding):

Reconnection Charge

- The current charge [established in 1991 per BCUC 1.52.3] is based on historical costs of the reconnection portion of the disconnection/

reconnection process.

- The proposed charge reflects the cost of the full disconnection/reconnection cycle [in F2006 per BCUC 1.52.3] as well as increases in labour and vehicle rates.

24.1 Please confirm that the reconnection charge was a cost-based charge and was approved by the Commission on that basis in Order G-130-07.

24.2 Please provide a calculation of the current minimum reconnection charge

in the same format as that used by BC Hydro in Section 4.6 and Appendix H of the 2007 RDA and approved by the Commission in Order G-130-07 for the following reconnections:

- customers with smart meters;
- customers with analog (“legacy”) meters;
- customers with radio off meters; and
- other residential customers without the on/off switch.

24.3 Please confirm that the cost of a remote reconnection was estimated by FortisBC in its recent AMI application to be less than \$10.

25.0 Customer consultation

Please provide details of consultation that has taken place between BC Hydro and its low-income customers on the subject of the reconnection fee following the installation of smart meters.

26.0 Reference: CEC 1.9.1 and 1.9.2 and 1.9.3 and 1.9.4 Exhibit B1, page 3-10

26.1 Under which of the three categories of allowable costs (“program costs”, “investigation costs” and “infrastructure costs”) does the expense incurred for additional check meters fall.

26.2 Please explain why it qualifies as an allowable cost under this category.

27.0 Reference: CEC 1.20.1.2 BCUC 1.6.5.2

27.1 Why is it necessary to await BC Hydro’s next rate design application in order to address any potential changes to the Meter Choices Program charges as opposed to addressing the issue as part of the next revenue requirement application (if it were to occur sooner)?

28.0 Reference: CEC 1.24.3.2.1

28.1 The response assumes that in the second case (i.e. where the customer initially chooses a radio-off meter), the customer will eventually leave the Meter Choice

Program and includes the exit cost in the initial fee. Why is this an appropriate assumption?

28.2 What is the difference in total charges to the customer between the approach adopted by BC Hydro for customers choosing the Radio-Off alternative and one where the customer would be charged in the initial fee for the installation of the radio-off meter but there would be no provision for a charge when/if a smart meter was installed?

29.0 Reference: CEC 1.25.4.4

29.1 Please reconcile the reported cost per customer in the last column with the reported total number customers and total costs in the preceding columns.

**30.0 Reference: CEC 1.32.1 and CEC 1.32.8.1
Exhibit B1, page 3-13, lines 10-12**

30.1 Given the extensive list of activities that are undertaken to process a new customer account, please explain more fully why modifying an account to reflect a request under the Meter Choice Program is expected to require the same amount of time.

30.2 To date, what portion of the requests under the Meter Choices program have required "customer communications"?

**31.0 Reference: Middleton 1.10.2
Ryder 1.14.2**

31.1 The continued use of a legacy meter will delay the installation of either a Smart Meter or a Radio-Off meter and, hence, also delay the date such meters will need to be exchanged due to seal expiry and produce a commensurate saving. Why is no credit provided for this saving?

32.0 Reference: Stachow 1.4.0

32.1 Please confirm that for Residential customers that currently have a legacy meter, BC Hydro will only visit the premise with the view to installing a smart meter or radio-off meter if the customer has proactively contacted BC Hydro (per the Meter Choices Program) and requested such an installation.

32.2 If not confirmed, please explain why not.

**33.0 Reference: Skogstad 1.3.2
Exhibit B1, Appendix E, page 2**

Under what circumstances will a customer be deemed to have elected a radio-off meter? According to Appendix E, customers that do not choose an option are deemed to have elected to retain their legacy meter.