

Intervenor Name: David Wong

Information Request To: BC Hydro

BCUC Hearing: Meter Choices Program

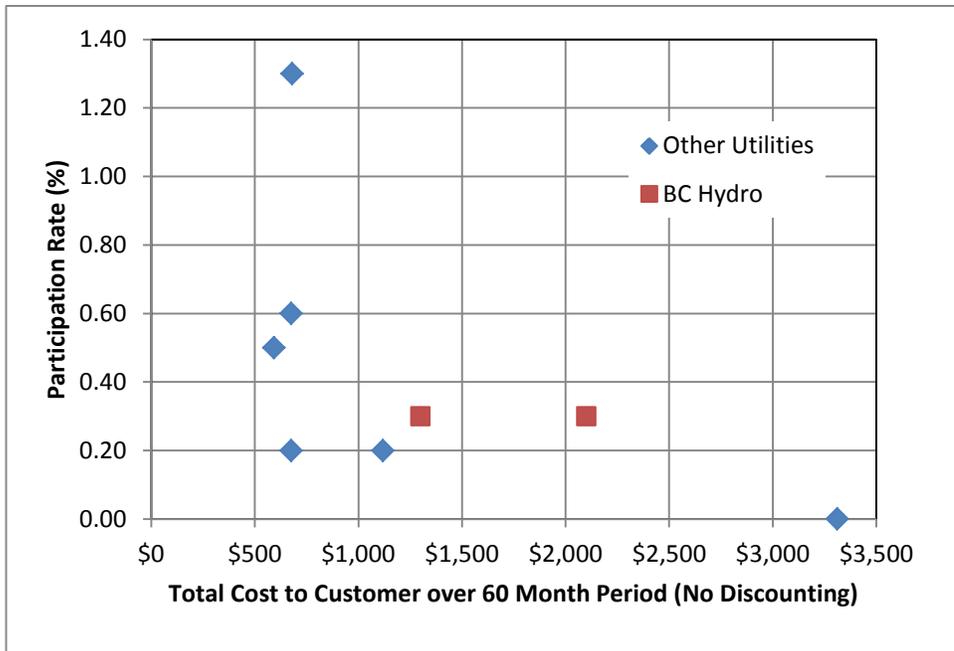
Date: 6 November 2013

1. Please file a copy of the “Smart Metering & Infrastructure Business Case”.
 - 1.1 Please confirm that the business case makes no allowance for the costs associated with the “Meter Choices Program”. If not confirmed, please indicate where in the business case such costs are included.
 - 1.2 On pages 11-13 of the business case, BC Hydro outlines “Lessons Learned from Other Jurisdictions”. On the bottom of page 11, BC Hydro states that “By adopting smart meters after learning from the experience of other utilities, BC Hydro has the advantage of knowing what factors contribute to successful implementation ...”. Please confirm that customer resistance to the installation of smart meters was one of the factors that some other utilities experienced.
 - 1.3 In general, the later in a capital project that changes are introduced, the higher the cost of those changes. Please confirm that if the “Meter Choices Program” had been included in the original capital project, the incremental costs associated with this program would be lower.
 - 1.4 Please provide revised estimated costs tables in section 3.4 of the Application based on the costs that would have been incurred had the “Meter Choices Program” been designed into the original smart meter program and incorporated in the original business case.
 - 1.5 Does BC Hydro believe that customers who elect to retain a legacy meter or a radio-off meter should be responsible for any additional “Meter Choices Program” costs associated with the fact that BC Hydro did not consider this program in the original design and business case?
2. In Table 3-3 of the Application, under capital costs, there does not appear to be any capital cost adjustment related to the avoided or deferred cost to BC Hydro related to the purchase of smart meters for those applicable customers who elect a legacy meter.
 - 2.1 Please confirm that this capital cost adjustment has not been included in BC Hydro’s Application.
 - 2.2 Based on the cost to BC Hydro of an individual residential smart meter, and assuming an 8% discount rate (as was used in the business case – see page 31), please calculate the annual avoided or deferred capital cost that should accrue to the benefit of an applicable customer if they elect to retain a legacy meter.

3. The following table is drawn from Table 3-2 of the Application. The total cost (column C) assumes that an applicable customer elects to participate in each program for 5 years, with no discounting monthly payments to present value. Two rows have been added to the table to show BC Hydro's proposed customer costs, as given in Table 3-1. BC Hydro's participation rate of 0.3% is based on the 5000 legacy meter and 5000 radio-off meter participation assumptions used by BC Hydro (page 3-4, lines 3 through 8 of the Application).

Utility	Initial Charge (\$) (A)	Monthly Charge (\$) (B)	Total Cost (Assuming 60 Month Customer Election Period) (A) + 60 x (B)	Participation Rate (%)
PG&E	75	10	675	0.6
SDG&E	75	10	675	0.2
CMP	20	11	680	1.3
PGE	251	51	3311	0
NVE	53	9	593	0.5
HQ	98	17	1118	0.2
BCH - legacy	0	35	2100	0.3
BCH - radio off	100	20	1300	0.3

This data has been plotted in the following graph:



- 3.1 Please confirm that, assuming legacy meters remain available, a customer choosing to retain a legacy meter would pay a total of \$2100 over a five year period, and that this cost would be in addition to the energy and connection charges for which they would also be responsible.
- 3.2 Will either or both PST and GST apply to the proposed “Meter Choices Program” charges?
- 3.3 The graph of participation rate versus total cost is an example of a price versus demand curve (with scatter), and shows generally higher participation rates with lower total costs and vice versa. (Note that the shape of the graph is not significantly impacted by the length of the period selected, since the majority of the total cost comes from the monthly charge.) Does BC Hydro believe that the participation rate in the “Meter Choice Program” will be in part a function of the total cost to the customer?
- 3.4 If the response to 3.3 is affirmative, has BC Hydro estimated the cost or charge versus participation rate function or obtained one from another utility? If so, please provide it.
- 3.5 Relative to the other utilities, BC Hydro’s proposed total cost relative to the participation rate appears to be above the demand curve constructed from the outcomes observed by other utilities, suggesting that a 0.1% participation rate might be a better forecast. Does BC Hydro believe that there are other factors that will lead to a higher participation rate relative to total cost than other utilities have experienced? If so, please explain.
- 3.6 Please provide an alternative version of Table 3-1 based on the assumption of a 0.1% participation rate.
- 3.7 In what ways is BC Hydro learning from the experience of other utilities to take advantage of knowing what factors contribute to successful implementation in developing the “Meter Choice Program”?
4. In section 3.4.2.6 of the Application, BC Hydro deals with the issue of legacy meter exchanges.
 - 4.1 What is the smallest size of residential meter group, as the term is used on page 3-16, line 11 of the Application, that BC Hydro has had in installed service over the last 15 years?
 - 4.2 Some applicable customers who elect to retain a legacy meter may do so for privacy reasons related to the collection of significantly more detailed consumption information in the smart meters. Given that under the proposed charge schedule, such customers will spend more than \$2000 over a five-year period, would BC Hydro consider purchasing additional analog meters to serve these customers?
 - 4.3 Does BC Hydro believe that the BCUC has the authority to order BC Hydro to purchase additional analog meters to serve these customers?

4.4 Please confirm that an applicable customer who has elected to retain a legacy meter can make a one-time election to have a smart meter installed at any time during the duration of the “Meter Choices Program”, and that assuming there is no failed installation, there will be no charge for this election.

5. Regulation 368/2010, attached to the Application as Appendix A, states:

3 (1) “... by the end of the 2012 calendar year, the authority must install and put into operation (a) a smart meter for each eligible premises ...”

where eligible premises “means a building, structure, or equipment of a customer of the authority if the building, structure, or equipment is connected to the electric distribution system and has an electricity meter, but does not include a building, structure or equipment where it is impracticable for the authority to install a smart meter”.

Clearly this requirement has not been met by BC Hydro, since in the Application it states that as of October 2013, 75,000 customers do not yet have smart meters (page 2-3, lines 14 through 17).

5.1 Does BC Hydro consider the request from a customer for a meter exchange to be “put on hold” to meet the criteria of a situation where it is impracticable to install a smart meter?

5.2 If not, was BC Hydro provided relief from this regulation?

5.3 If so, please provide the documentation related to this relief.

5.4 If neither of the above, is BC Hydro in contravention of this regulation, and if so, what consequence(s) has it suffered, or will it suffer, as a result?

5.5 Does BC Hydro believe that customer requests for meter exchanges “to be put on hold” has adversely impacted its ability to implement the overall smart meter program in a timely and cost effective manner?

5.6 If so, please estimate the length of the delay and the associated cost, and explain why no request has been made to the BCUC to recover this additional program delay cost from those customers who have requested meter exchanges “to be put on hold”.