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November 17, 2015

Via Email
Original via Mail

British Columbia Hydro and Power Authority
Regulatory & Rates Group
16th Floor – 333 Dunsmuir Street
Vancouver, BC
V6B 5R3

Attention: Mr. Tom Loski, Chief Regulatory Officer

Dear Mr. Loski:

Re: British Columbia Hydro and Power Authority (BC Hydro) 2015 Rate Design Application (the Application)
FortisBC Energy Inc. and FortisBC Inc. (collectively FortisBC) Information Request (IR) No. 1 to BC Hydro

In accordance with the Regulatory Timetable set by the British Columbia Utilities Commission Order G-156-15A, attached is FortisBC IR No. 1 to BC Hydro on the above noted Application.

If further information is required, please contact Michelle Carman at 604-592-7458.

Sincerely,

on behalf of FORTISBC

Original signed by: Michelle Carman

For: Diane Roy

Attachment

cc : Commission Secretary
Registered Parties (email only)

REQUESTOR NAME: **FortisBC Energy Inc. and FortisBC Inc. (FortisBC or the Companies)**

INFORMATION REQUEST ROUND NO: 1

TO: BRITISH COLUMBIA HYDRO & POWER AUTHORITY

DATE: **November 17, 2015**

PROJECT NO:

APPLICATION NAME: **BC Hydro 2015 Rate Design Application**

- 1.0 Topic: F2016 Cost of Service Study and Methodology**
Reference: Chapter 3, Table 3-6, Page 3-36; BCUC IR 1.17.1

Table 3-6 R/C Ratios

Rate Class	R/C Ratios		
	Final F2016 COS Study results	F2013 Fully Allocated COS	
Rate Class	Final Study filed in the RDA (%)	Draft F2016 COS study posted to RDA website in February 2015 (%)	Filed on February 8, 2014 with the Commission (using 2007 RDA decision) (%)
COLUMN	A	B	C
Residential	93.9	93.9	89.8
SGS	112	112	126.7
MGS	117.1	120.5	120.8
LGS	100.9	99.7	102.1
Irrigation	85.1	85.2	86.6
Street Lighting	134.1	134.1	115.7
Transmission	101.4	101.5	104.4
Total Classes	100	100	

- 1.1 Please reproduce Table 3-6 with an additional column (i.e. Column (D)) that provides the R/C ratios for F2016 using the same 2007 RDA COS allocation methodologies that generate the results in Column C for F2013.

- 2.0 Topic: F2016 Cost of Service Study and Methodology**
Reference: Chapter 3, Table 3-1, Page 3-10; Table 3-6, Page 3-36

Table 3-1 provides descriptions of the COS allocation methodology changes that BC Hydro has adopted in its F2016 COS study relative to the corresponding 2007 RDA decision COS allocation determinations.

2.1 Please complete the table below. For column (2), please provide the R/C ratios for F2016 using the methodologies approved in the 2007 RDA decision (i.e. the additional column requested in question 2.1) and for the next five columns (columns (3) – (7)), please provide the incremental percentage impact on the R/C ratios from sequentially introducing each of the five methodology changes set out in Table 3-1. For column (8), please provide a summation of column (2) and the incremental percentages from each of the five methodology changes set out in Table 3-1.

		Revenue to Cost (R/C) Ratios (%)						
		Incremental Effects of Table 3-1 COS Methodology Changes						
Rate Class	F2016 R/C Ratios using 2007 RDA	DSM 90% Gen / 5% Trans / 5% Dist	Heritage supply 55% energy / 45% demand	IPP costs 93% energy / 7% demand	Sub-function alize the Distribution system:	Classify cust care costs 100% cust	Sum of Column (2) through (7)	Final Study filed in the RDA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Illustrative Example ¹	93.2	0.3	0.9	0.5	1.2	1.1	97.2	97.5
Residential								93.9
SGS								112.0
MGS								117.1
LGS								100.9
Irrigation								85.1
Street Lighting								134.1
Transmission								101.4
Total Classes	100.0							100.0

¹ This example is for illustrative purposes only to demonstrate the intent of the question and is not based on evidence provided in this Application

2.1.1 Please provide an explanation of the differences if the results of the summation in column (8) are different from the Final Study F2016 R/C ratios identified in first column of Table 3-6 (reproduced in column (9) above).

3.0 Topic: Rate Class Segmentation, MGS and LGS Breakpoint
Reference: Chapter 4, Figure 4-2, Page 4-11

On page 4-11 BCH states that "it is difficult to pinpoint a clear breakpoint in the downward trend of unit costs".

3.1 Please confirm that a clear breakpoint between MGS and LGS cannot be identified with disaggregated data.

4.0 Topic: Rate Class Segmentation, Transmission Service Rate Class
Reference: Chapter 4, Table 4-4 and Attachment C-3B, Slide 28

In Table 4-4 on Page 4-21, BCH states that "the differential between an individual customer's R/C ratio and the Transmission Service rate class average is greater for some customers (#12 and #13 on Slide 40) than it is for these two utilities".

4.1 Please confirm that, relative to the class averages, there are differences in load characteristics seen for other customers within the Transmission rate classes (i.e. customers other than FortisBC and New Westminster).

4.1.1 As shown on Slide 39 of Attachment C-1B, there are a number of customers that have a higher than average coincidence factor as compared to the Transmission Service Rate class average (as provided in Table 4-3) or a lower load factor as compared to the class average or FortisBC and New Westminster. Please explain why BCH has not proposed changes for these customers similar to the change proposed for FortisBC and New Westminster?

5.0 Topic: Rate Class Segmentation, Transmission Service Rate Class and F2016 Cost of Service Study
Reference: Chapter 4, Page 4-19, row 11 to 14.

BC Hydro used F2014 hourly load data for each Transmission customer to assign F2016 costs to individual customers on a pro rata basis using common allocators from the F2016 COS study

5.1 Please provide a detailed breakdown of the cost allocation in a comparable format to Schedule 4.1 of Appendix C-2C. Please also include a summary of which common allocators were used.

5.2 Please provide the estimated range of R/C ratios for all of the more than 100 customers in the Transmission Service Rate Class whose individual R/C ratio was estimated and used in the Individual Customer R/C ratio analysis (see page 4-19, lines 10-19). Please provide this by number of customers in increments of 5% as demonstrated in the table below:

R/C Ratio Range	Number of Customers
70% to 75%%	0
75% to 80%	1
80% to 85%	1
Etc.	

6.0 Topic: Residential Inclining Block
Reference: Chapter 5, Page 5-42 and Attachment C-3B, Slide 28

On page 5-42 Saskpower is identified as having the lowest percentage (at 22%) of allocated fixed costs recovered by the residential basic charge and this is

presented as a comparator with BC Hydro's basic charge recovering 45% of allocated fixed costs, yet at \$20.22/month for City customers and \$29.22/month for rural customers, the Saskpower residential basic charge is roughly 4 to 6 times BC Hydro's residential basic charge of \$5/month.

- 6.1 Please confirm that based on the information provided in Attachment C-3B, Slide 28, the calculated value for the annual fixed cost allocation for Saskpower residential customers is in the range of \$1,103 / year (\$20.22 per month City x 12 months per year /22%) to \$1,592/year (\$29.19 per month Rural x 12 months per year / 22%) and for BC Hydro residential customers is approximately \$133 per year (\$5 per month x 12 months per year / 45%).
- 6.2 Please list the key factors and differences in cost allocation approach that explain why Saskpower's allocated fixed costs per customer per year for residential customers are roughly 8 to 12 times as large as BC Hydro's.
- 6.3 Please confirm that all of the residential basic charges presented in the Canadian jurisdiction survey (Appendix C-3B, Slide 28) are between 2 and 6 times the level of BC Hydro's RIB basic charge (with the exception of Manitoba Hydro's residential basic charge for <200 Amp. Service, which is about 1.5 times the RIB basic charge).

7.0 Topic: Residential Inclining Block
Reference: Chapter 5, Page 5-42 and Attachment C-3B, Slide 28

"The current RIB rate basic charge recovery of 45 per cent is in the range of Canadian electric utility residential rate basic charge cost recovery but at the lower end of the range". Figure 5-18 which depicts BC Hydro's requested RIB pricing approach and shows the RIB Step 2 rate as exceeding the upper limit of the Energy LRMC.

- 7.1 Has BC Hydro considered making a one-time shift in RIB revenue recovery from the Step 2 rate to the basic charge, followed by adopting BC Hydro's proposed rate change approach (see Application, p.5-33) of applying the yearly approved revenue requirement increases to each of the RIB rate components?
 - 7.1.1 Does BC Hydro agree that such a one-time shift could be used to bring the Step 2 rate within the LRMC range while at the same time increasing the RIB basic charge and related revenue recovery to a level more typical for Canadian electric utilities?
 - 7.1.2 How much cost shifting of this nature could be done without causing unacceptable rate impacts for customers in particular sub-segments of the residential class?
 - 7.1.3 Please provide rate impact analyses of one-time RIB revenue recovery shifts from the Step 2 rate to the basic charge which increase the basic charge by (i) \$2.00/month, and (ii) \$4.00/month. Assume in both cases that, other than the one-time revenue shift, BC Hydro's proposed rate change approach of applying the

approved revenue requirement increases to each of the RIB rate components applies for F2017 to F2019.

7.1.3.1 Relative to BC Hydro's proposed approach without any intra-class revenue shifting, please explain which residential sub-segments are most affected by the one-time revenue shift to the basic charge, and provide a summary of the bill impacts on the most-affected sub-segments in both percentage terms and annual dollar amounts.

8.0 Topic: General Service
Reference: Chapter 6

8.1 Please provide a bill frequency analysis, in a table format, for SGS, MGS & LGS. For SGS, please show the number of customers in blocks of annual consumption of 5,000 kWh; for MGS, please show the number of customers in blocks 25 kW to 175 kW and increments 5,000 kWh to 600,000 kWh; and for LGS, please show the number of customers in blocks of 25kW starting from 125kW to 500kW, corresponding to increments 10,000 kWh starting from 350,000 kWh to 1,000,000 kWh.

9.0 Topic: Freshet Pilot
Reference: Chapter 7, Page 7-40 and Appendix C-5B

One of the identified drivers of Freshet rate take-up is the customer's ability to increase production capacity. It is likely in many cases that increasing production would depend on customers investing new capital to increase production capacity.

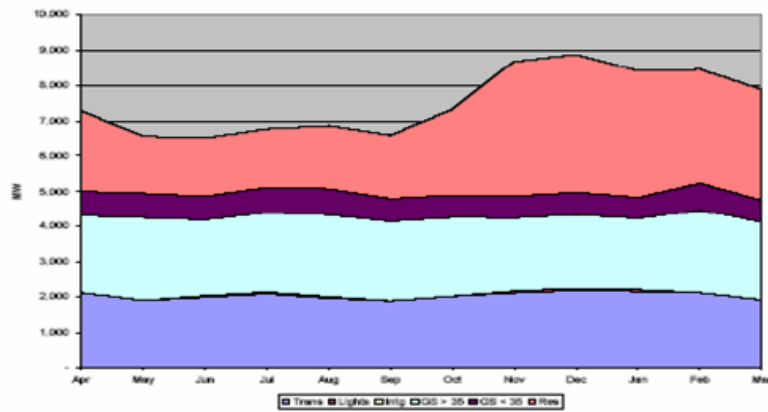
9.1 Please confirm that typically customers prefer longer term assurance before making capacity investments and given that the pilot is only two years in duration, customer take-up of the pilot may be limited and as such, may not be representative of potential take-up if the rate was permanent.

9.1.1 Please confirm that BC Hydro has made an assessment of whether there is broad interest in the Freshet Pilot program amongst all RS 1823 customers?

9.1.2 If confirmed, please provide the findings of the assessment, including whether RS 1823 customers in certain industry sectors were less supportive of the proposal.

10.0 Topic: Monthly Peak by Class
Reference: BCH 2007 Phase 1 RDA Decision, page 74

Table 3-4
Contribution to Monthly Peak by Class



Source: Exhibit B-3, Terasen 1.9.1

10.1 Please reproduce the graph from page 74 of the BCH 2007 Phase 1 RDA Decision using the most recent data from F2015 for the monthly peak by class.

10.1.1 To the extent that the shape of the graph has changed, please explain the factors that contribute to this change.