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July 10, 2018

Industrial Customers Group
c/o #301 – 2298 McBain Avenue
Vancouver, BC V6L 3B1

Attention: Mr. Robert Hobbs

Dear Mr. Hobbs:

Re: FortisBC Inc. (FBC)
Project No. 1598939
2017 Cost of Service Analysis and Rate Design Application (the Application)
Response to Industrial Customers Group (ICG) Information Request (IR) No. 2

On December 22, 2017, FBC filed the Application referenced above. In accordance with British Columbia Utilities Commission Order G-101-18 establishing the Regulatory Timetable for the review of the Application, FBC respectfully submits the attached response to ICG IR No. 2.

If further information is required, please contact Corey Sinclair at (250) 469-8038.

Sincerely,

FORTISBC INC.

Original signed:

Diane Roy

Attachment

cc (email only): Commission Secretary
Registered Parties

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1.0 Reference: Exhibit B-1, page 91

“The Special Provisions for each rate contain language allowing discounts to be provided under certain conditions.”

1.1 Please fill out the below table to provide information on transmission access discounts granted by FBC in 2017.

	# of Customers to Receive Discounts in 2017	# of Transactions to Receive Discounts in 2017	\$ Value of Discounts Granted in 2017
RS 101 Long Term			
RS 101 Short Term			
RS 102			
Total			

Response:

There were no transmission access discounts granted by FBC in 2017.

1.2 Please comment on whether the three principal requirements, which are identified in response to ICG IR 1.10.1, that apply to discounts for Ancillary Services are relevant to determinations of “discounts to be provided under certain conditions”?

Response:

As FBC identified in the response to ICG IR 1.10.1, any offered discount must be offered for the same period to all Eligible Customers on the Transmission Provider’s system. To further clarify, it must also be the same path. Therefore, if a discount is offered on a particular path, that discount does not apply to a different path.

The intent of the Special Provisions found on page 91 of the Application is as stated on row 13. “The discount would be determined with the intent of maximizing the revenue generated”. If the overall effect to the Company of offering a discount on a particular path over a certain period would be to decrease overall revenue, then such a discount would not be offered.

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1 **2.0 Reference: Exhibit B-1, Appendix I-1, Appendix C**

2 2.1 Please comment on whether the above reference (Exhibit B-1, Appendix I-1,
3 Appendix C) to Rate Schedule 101 is to the same rate schedule as identified as
4 RS101 in the current proceeding?

5
6 **Response:**

7 The reference noted is with regard to Rate Schedule 101 - Long-Term and Short-Term Firm
8 Point-To Point Transmission Service. The numbering of this rate schedule has remained
9 unchanged since its initial approval and is the same today. It is also referred to in the current
10 Application as RS 101.

11
12

13

14 2.2 Please comment on whether in scenario 3, as identified in BCUC IR 1.62.1, BC
15 Hydro would be required to utilize Network Integration Transmission Service to
16 serve their Network Load?

17
18 **Response:**

19 FBC is not aware of any scenario, including scenario 3 as identified in BCUC IR 1.62.1, where
20 BC Hydro would be required to utilize its own tariff service, including Network Integration
21 Transmission Service.

22
23

24

25 2.3 Please comment on whether the above reference to BC Hydro's Native Load
26 Customers (Exhibit B-1, Appendix I-1, Appendix C) is to the same customers that
27 would be the customers to be served if BC Hydro utilized Network Integration
28 Transmission Service to serve the Network Load?

29
30 **Response:**

31 As discussed in the response to ICG IR 2.2.2, FBC does not believe that BC Hydro would ever
32 utilize its own Network Integration Transmission Service and the context of the question is
33 uncertain. In an attempt to provide some clarity, FBC provides the following response.

34 Appendix C in the above reference is referring to the situation where BC Hydro, or its agent, is
35 purchasing power from a party inside FBC's service area, but not FBC, and delivering it to the

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1 BC Hydro service area. This is similar to scenario 3 as described in BCUC IR 1.62.1. As
2 confirmed in Exhibit B-1, Appendix I-1, Appendix C, under this scenario, BC Hydro would be
3 required to pay FBC's Rate Schedule 101. The only potential difference between the two
4 scenarios is who should be paying the transmission charges, but in both cases FBC believes
5 that Rate Schedule 101 or 102 should be applicable. Who ultimately pays the transmission
6 costs will be determined by the commercial relations between BC Hydro and the party from
7 which they are purchasing the power.

8

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1 **3.0 Reference: Exhibit B-1, Appendix I-3, Recital E**

2 3.1 Please provide WKP's response to the Commission's information request
3 referenced in Recital "E" of Order G-12-99.

4
5 **Response:**

6 Please refer to Attachment 3.1.

7

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1 **4.0 Reference: Exhibit B-2, COSA Model, working spreadsheet, “Revenues” Tab,**
2 **cells C5:L5**

3 4.1 Row 5 of the “Revenues” tab in the working spreadsheet identifies nine types of
4 customers. This tab also provides estimated revenues from each type of
5 customer. The types of customers are:

- 6 • Residential
- 7 • Small Commercial 20
- 8 • Commercial 21/22
- 9 • Large Commercial Primary 30/32
- 10 • Large Commercial Transmission 31
- 11 • Lighting
- 12 • Irrigation
- 13 • Wholesale Primary 40
- 14 • Wholesale Transmission 41

15
16 Which of these categories includes the revenue that would be received by FBC
17 due to the proposed changes to RS 101 and RS 102?

18
19 **Response:**

20 The Company consulted with EES to provide the following response.

21 Revenues from RS 101 and RS 102 would not be included in any of these classes. Revenue
22 would be included in Other Revenues in the Revenue Requirement portion of the COSA, under
23 Transmission Access Revenue.

24

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5.0 Reference: Exhibit B-2, COSA Model, working spreadsheet, “Rev Req” Tab, Cell D246

5.1 Cell D246 of the “Rev Req” tab identifies \$1,179,000 as Transmission Access Revenue. This amount is netted off the revenue requirement for transmission services. Is this FBC’s estimate of the total revenue that would be received by FBC from RS 101 and RS 102?

Response:

The Company consulted with EES to provide the following response.

The \$1,179,000 is the forecast of Transmission Access Revenue based on the 2017 forecast and does not include incremental revenue from RS 101 and RS 102 that may result from this Application.

5.2 Does it include revenue under any other tariffs?

Response:

The Company consulted with EES to provide the following response.

It includes revenues from all transmission-related rates, including RS 101 through RS 107.

5.3 If this amount is not FBC’s estimate of the total revenue that would be received from RS 101 and RS 102, please provide FBC’s estimate of the total revenue that would be received by FBC based on the proposed new versions of RS 101 and RS 102, and the revenue that would be received by FBC under the current RS 101 and RS 102 (i.e. if the changes are not approved).

Response:

As discussed in response to ICG IR 2.5.1, the \$1,179,000 is the forecast of Transmission Access Revenue based on the 2017 forecast and does not include incremental revenue from RS 101 and RS 102 that may result from this Application.

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1 Currently FBC does not receive any revenue under RS 101 and RS 102, and that would
2 continue to be the case if the proposed changes are not approved, given FBC's current
3 transmission access customer base.

4 If the changes are approved, FBC expects that the increased revenue from RS 101 and RS 102
5 would be approximately \$3.5 to \$4.0 million per year. This does not include the potential
6 reduction in revenue that would occur as a result of the proposed changes to the Ancillary
7 Service Rates, and shown in Table 7-9 of the Application and as described in the response to
8 ICG IR 1.11.13.

9
10
11
12 5.4 Please identify where the revenue that would be received by FBC based on the
13 proposed changes to RS 101 and RS 102 is shown in the COSA model.
14

15 **Response:**

16 Please refer to the response to ICG IR 2.4.1.
17
18
19

20 5.5 In FBC's view, is the proposed rate design expected to result in appropriate
21 revenue recovery by FBC, or is it expected to result in over-recovery of
22 transmission revenues? Please base this response on the forecast rates in the
23 COSA, and FBC's current transmission access customers.
24

25 **Response:**

26 The Company consulted with EES to provide the following response.

27 The rate design is expected to result in the appropriate revenue recovery by FBC. While
28 revenue may increase under the proposal, those revenues would be subsequently used to
29 offset the transmission expenses allocated to retail customers in the COSA. In addition, any
30 increase in revenues will be accounted for in the annual review process and will result in a lower
31 overall rate increase for all customers.
32
33
34

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5.6 Please explain FBC's proposed treatment of variances between forecast and actual RS 101 and RS102 revenues?

Response:

In FBC's revenue requirements model, as in the COSA model, Transmission Access Revenue (including RS 101 and RS 102 revenue) is classified as Other Revenue and is an offset to total revenue requirements, as is appropriate since transmission expenses are allocated to all customers connected to FBC's system. Annual variances between forecast and actual Other Revenue, including Transmission Access Revenue, are returned to or recovered from customers through general rate changes in the subsequent year. FBC is not proposing any change to this treatment.

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6.0 Reference: Exhibit B-8, BCUC IR 1.20.1

“While the cited Commission decisions note that future rebalancing need not take place unless the R/C ratios again fall outside of the accepted range of reasonableness, they are silent on what the future target of the rebalancing should be in the case where such an excursion outside the range of reasonableness comes to pass. FBC does not view it as an equitable or logical outcome to move only two classes to unity while leaving other classes untouched.”

6.1 Please explain whether there were rate classes with RC Ratios between 95 percent and 105 percent in the 2009 COSA process? If so, were these rate classes also adjusted to reflect equitable or logical treatment? If not, why not, and why was this equitable in 2009 but not now?

Response:

There were customer classes outside of the 95% - 105% range of reasonableness in the 2009 COSA process, as well as some within. Commission Order G-156-10 required that the target revenue to cost ratio for all classes would be unity. Therefore all classes were rebalanced to that level of cost recovery regardless of their starting point. The rebalancing scenario that FBC considers inequitable is where two classes are rebalanced to unity while other classes are not rebalanced at all. This is distinct from what occurred in 2010.

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1 **7.0 Reference: Exhibit B-8, BCUC IR 1.62.1 and BCUC IR 1.63.5**

2 The current situation is not analogous to the circumstances envisioned in Order G-12-
3 99, since only FBC is providing wheeling services.

4 7.1 Assuming scenario 3, as identified in BCUC 1.62.1, was
5 envisioned/contemplated in Order G-12-99, would it then be more appropriate
6 for FBC to seek a reconsideration and variance of Order G-12- 99, instead of
7 seeking a clarification of Order G-12-99?
8

9 **Response:**

10 FBC is not seeking a clarification of Order G-12-99 (which is the premise of ICG IR 2.7.1), nor is
11 it requesting reconsideration of Order G-12-99. FBC is seeking to amend the language of its
12 existing tariff schedules to provide clarity to customers that may wish to utilize the FBC
13 transmission system.

14

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1 **8.0 Reference: Exhibit B-8, BCUC IR 1.63.5**

2 "... it is less likely that if a retail or wholesale customer of FBC decided to use the
3 wheeling tariff to meet its load that there would be a corresponding reduction of PPA
4 usage (the revenue shift), as envisioned in Order G-12-99."

5 8.1 Please comment on whether FBC's or BC Hydro's evaluations of supply
6 alternatives are being affected by the current use of RS101 and RS102?

7
8 **Response:**

9 FBC cannot comment on BC Hydro's potential evaluations. The current use of RS101 and
10 RS102 do not impact FBC's evaluations of supply alternatives.

11

12

13

14 8.2 Please identify where in Order G-12-99 it is envisioned that if a retail or
15 wholesale customer of FBC decided to use the wheeling tariff to meet its load

16

17 **Response:**

18 FBC cannot provide a response as there is no question contained in the text.

19

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1 **9.0 Reference: Exhibit B-8, BCUC IR 1.64.3**

2 9.1 Please explain whether “the resulting revenues of ... approximately \$3.5 million,
3 \$3.54 million and \$3.64 million” would be incremental revenues to FBC with no
4 incremental costs to FBC? Please provide the detailed calculation of the same
5 amounts and explain increases over the 2017 forecast for such revenue used in
6 the COSA? that there would be a corresponding reduction of PPA usage?

7
8 **Response:**

9 Yes, those values would increase revenue with no incremental cost. As discussed in response
10 to ICG IR 2.5.1, the Transmission Access Revenue included in the 2017 Forecast does not
11 include incremental revenue that may result from appropriate charges pursuant to RS 101 and
12 RS 102 as described in this Application.

13 The values in BCUC IR 1.64.3 were derived as follows:

Year	Customer Charge Rate	RS101 Monthly Rate	Customer Charges Applied	MVA- Months Billed	Customer Charges (\$000)	Sum of Monthly Wheeling Charges (\$ millions)	Total (\$ millions)
2015	3,005	6,841	26	500	78	3.42	3.50
2016	3,097	7,050	24	492	74	3.47	3.54
2017	3,185	7,250	24	492	76	3.57	3.64

14

15 The proposed changes to RS 101 and RS 102 would not change FBC’s BC Hydro PPA usage.

16

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1 **10.0 Reference: Exhibit B-8, BCUC IR 1.73.1**

2 10.1 Please explain whether FBC's calculation of system losses is consistent with BC
3 Hydro's methodology described in the following document:
4 [https://www.bchydro.com/content/dam/BCHydro/customer-](https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/regulatory-planning-documents/transmission-planning/transmission-system-studies-guide.pdf)
5 [portal/documents/corporate/regulatory-planning-documents/transmission-](https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/regulatory-planning-documents/transmission-planning/transmission-system-studies-guide.pdf)
6 [planning/transmission-system-studies-guide.pdf](https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/regulatory-planning-documents/transmission-planning/transmission-system-studies-guide.pdf)

7
8 **Response:**

9 Due to time constraints, FBC cannot provide a complete comparison of BC Hydro and FBC's
10 loss methodology, but FBC can confirm that they do appear to be consistent.

11 Both FBC and BC Hydro use a power flow calculation through third party software, and use
12 outputs from that program to create an annual estimate.

13
14

15
16 10.2 Please provide the actual calculations for FBC's derived values of losses.

17
18 **Response:**

19 The Company consulted with EES to provide the following response.

20 The total loss percent is based on the difference between total kWh sales of 3,105 GWh at the
21 customer meter and the total system gross energy requirement of 3,387 GWh for 2016.

22
23
24

25 10.3 Please provide a reference for FBC's use "industry data" for the assumed value
26 of 1.5 percent for transformer losses.

27
28 **Response:**

29 Please refer to the information provided at the links below. These sources generally indicate
30 that current standards for typical transformer losses are in the range of 1.5 percent and that this
31 represents a reasonable number for use in the COSA.

32 <http://apps.geindustrial.com/publibrary/checkout/DEQ-226?TNR=FAQs|DEQ-226|generic>

33 [https://www1.eere.energy.gov/buildings/appliance_standards/standards.aspx?productid=55&act](https://www1.eere.energy.gov/buildings/appliance_standards/standards.aspx?productid=55&action=viewcurrent#current_standards)
34 [ion=viewcurrent#current_standards](https://www1.eere.energy.gov/buildings/appliance_standards/standards.aspx?productid=55&action=viewcurrent#current_standards)

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1 https://www.ecfr.gov/cgi-bin/text-idx?SID=fb9b81787f3d7d4d7c453df82505b3aa&mc=true&node=sp10.3.431.k&rgn=div6%20-%20se10.3.431_1196#se10.3.431_1196

2
3
4
5
6
7 10.4 Please provide examples of any other utilities using FBC's methodology to
8 determine system losses.

9
10 **Response:**

11 FBC is not aware of the specific methods used by other utilities to assume losses for use in a
12 COSA, but notes that the standards referenced in the response to ICG IR 2.10.3 have general
13 applicability within the utility industry.

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1 **11.0 Reference: Exhibit B-15, ICG IR 1.3.1**

2 11.1 Please provide a summary table that shows Gross Plant, CIAC, accumulated
3 depreciation and net plant on an annual basis since 2008. Please show an
4 example calculation how the gross plant and net plant values are calculated from
5 year to year.
6

7 **Response:**

8 Net Plant in Service is equal to Gross Plant in Service less Accumulated Depreciation and
9 CIAC. The values are shown in the table below.

Year	Plant in Service	Accumulated Depreciation	CIAC	Net Plant in Service
	(\$000s)			
2008	1,165,457	(272,653)	(86,783)	806,021
2009	1,273,476	(298,411)	(90,267)	884,798
2010	1,403,617	(319,733)	(93,763)	990,121
2011	1,531,830	(353,725)	(95,551)	1,082,554
2012	1,589,904	(391,358)	(97,671)	1,100,875
2013	1,673,361	(433,450)	(97,272)	1,142,639
2014	1,784,939	(468,020)	(102,696)	1,214,223
2015	1,859,210	(502,380)	(105,995)	1,250,835
2016	1,918,783	(548,098)	(110,943)	1,259,742
2017	1,980,112	(589,331)	(119,812)	1,270,969

10

11 The year to year calculation is illustrated in the example below, which shows the components
12 for 2017.

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	(\$000s)
Plant in Service, Beginning Balance	1,918,783
Additions to Plant	71,530
Retirements	(10,254)
Other Adjustments	53
Plant in Service, Ending Balance	1,980,112
Accumulated Depreciation, Beginning Balance	(548,098)
Depreciation Expense	(55,980)
Retirements	10,254
Cost of Removal	4,473
Other Adjustments	20
Accumulated Depreciation, Ending Balance	(589,331)
Contributions In Aid of Construction, Beginning Balance	(110,943)
Additions	(12,533)
Depreciation	3,663
Contributions In Aid of Construction, Ending Balance	(119,812)
Net Plant in Service, ending Balance	<u>1,270,969</u>

Note: Adjustments are due to the correction of AMI meters originally recorded in the legacy meters plant account.

1

2

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1 **12.0 Reference: Exhibit B-15, ICG IR 1.4.1**

2 “The revenues associated with RS 37 are related to service from generation and
3 transmission facilities. The revenues are intended to compensate all customers for use
4 of the fixed system, and are allocated to all customers that contribute to the fixed costs
5 of the utility. If the COSA was changed to allocate the revenues only on the basis of the
6 generation and transmission rate base, the RC ratio for the RS 31 class would change
7 from 107.0 percent to 107.2 percent. This difference would not have resulted in a
8 change to the proposed rates for RS 31. The proposed rebalancing would move the RC
9 ratio from 104.7 percent to 104.9percent and the proposed RC ratios would still be within
10 the 95 to 105 range of reasonableness.”

11 12.1 Please explain how RS 37 is related to any service from generation when all RS
12 37 energy is assigned a value from Mid-C, including transmission charges?

13
14 **Response:**

15 The Company consulted with EES to provide the following response.

16 While the RS 37 charges are based on market prices from Mid-C, that does not mean that FBC
17 buys power from Mid-C to serve that load in any or all cases. However, all of the power supply
18 costs incurred by FBC are included in the revenue requirements, including any power
19 purchased to serve RS 37. The total power supply costs are allocated to all customers in the
20 COSA, excluding RS 37, and therefore all of those customers must be compensated for power
21 supply costs allocated to them that are actually incurred on behalf of RS 37. In terms of
22 transmission, the transmission cost included in RS 37 pricing is only to deliver the power from
23 Mid-C to the FBC system. Use of the FBC transmission system to deliver that power to the
24 customer is not included in the RS 37 energy price.

25
26
27
28 12.2 The transmission charges for RS 37 energy include an amount for transmission
29 from Mid-C to the border. Will FBC's proposed changes to RS 101 and RS 102
30 create any transmission charges from the border to the customer?

31
32 **Response:**

33 The proposed changes to the language of RS 101 and RS 102 will have no impact on the
34 pricing of RS 37.

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1

2 12.3 Please provide the revised COSA model spreadsheet that yields the RC ratio of
3 104.9 percent reference in the response and identify where any changes were
4 made.

5

6 **Response:**

7 The Company consulted with EES to provide the following response.

8 The requested COSA model spreadsheet is provided as Attachment 12.3. Changes in the
9 model are highlighted in yellow. Note that the adjusted RC ratio for RS31, after rebalancing,
10 would be 104.8 percent rather than 104.9 percent.

11

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1 **13.0 Reference: Exhibit B-15, ICG IR 1.5.1**

2 “The split is based on the equivalent purchases under RS 3808 and so both the amounts
3 of demand and energy, as well as the RS 3808 rates would impact the result. The
4 Waneta Expansion project was added since the 2009 COSA and the equivalent
5 purchase amount under RS 3808 included the added capacity. This led to a higher
6 demand-related amount than in 2009.”

7 13.1 Please provide the actual values of the RS 3808 purchases used for this
8 Application and for the 2009 COSA, and show how these values were used in
9 the assignment of the demand and energy cost.

10

11 **Response:**

12 The Company consulted with EES to provide the following response.

13 The values used and the calculations resulting in the demand and energy splits for both the
14 2017 COSA and 2009 COSA are included in Attachment 13.1. These calculations are also
15 contained in the power supply tab for each COSA. Calculations are completed for each month
16 to get the total annual costs. The spreadsheet shows the amount of energy and demand
17 assumed for BC Hydro 3808 purchases, as well as the price of power each month under the
18 contract. The spreadsheet also shows the calculations and resulting cost of equivalent
19 purchases for both the FBC-owned resources and the Brilliant/Waneta purchases.

20

21

22

23 13.2 Please explain why the Waneta Expansion costs are not treated the same as
24 Generation Rate Base while the BCH 3808 purchases (as shown in Exhibit B- 1,
25 Section 5.1.2.2.2, Table 5-8, page 48) are shown the same as Generation Rate
26 Base with a 20% Demand and 80% Energy split.

27

28 **Response:**

29 The Company consulted with EES to provide the following response.

30 The Waneta Expansion cost is not treated the same as generation rate base because it does
31 not provide both demand and energy¹ on a standalone basis, as is the case for FBC owned
32 generation rate base. The split between demand and energy is based on the equivalent power
33 cost under RS 3808 for each resource. This calculation is made independently for the FBC
34 resources and the combined Brilliant/Waneta purchases, resulting in different percent amounts
35 for demand and energy.

¹ FBC buys only capacity from the Waneta Expansion.

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The split in demand and energy costs for BC Hydro purchases is based on the actual charges for purchased amounts. In the Notes column for Table 5-8, the split is noted as being “As Charged”. The Classification of 20% Demand/80% Energy in the Classification column of that table is incorrect. The correct split, based on the “As Charged” amounts used in the COSA, is 26% Demand and 74% Energy. FBC is filing an errata to correct this, concurrent with the filing of these IR responses.

13.3 Please provide a summary table showing the effects on the RC Ratios if the 2009 COSA 20%/80% Demand/Energy split was used. Please also provide the COSA model spreadsheet and identify where all changes were made.

Response:

The Company consulted with EES to provide the following response.

The requested COSA model spreadsheet is provided as Attachment 13.3. Changes in the model are highlighted in yellow. The change to a 20% demand/80% energy split for combined Brilliant/Waneta costs leads to very minor changes in the RC ratios. The following table shows the RC ratios as filed and with the requested change.

	Adjusted RC Ratio As Filed	Adjusted RC Ratio With 20% Demand/80% Energy split for Brilliant/Waneta
Residential	98.40%	98.56%
Small Commercial 20	102.18%	102.13%
Commercial 21/22	104.73%	104.55%
Large Comm Primary 30/32	103.96%	103.18%
Large Comm Transmission 31	107.04%	107.00%
Lighting	92.24%	91.85%
Irrigation	97.16%	96.73%
Wholesale Primary 40	96.70%	96.74%
Wholesale Transmission 41	103.90%	103.81%
Total	100.00%	100.00%

FortisBC Inc. (FBC or the Company) 2017 Cost of Service Analysis and Rate Design Application (the Application)	Submission Date: July 10, 2018
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1 **14.0 Reference: Exhibit B-15, ICG IR 1.8.1**

2 “The billing ratchet is necessary to ensure that the rate reflects the fixed nature of many
3 of the costs of FBC, including the Waneta Expansion. The costs of the Waneta
4 Expansion are fixed each month and cannot be avoided if customers have lower peaks.”

5 14.1 Please identify the portion of the costs of the Waneta Expansion that are
6 included in the Wires Charge and the portion in the Power Supply Charge. Why
7 would one charge be subject to an eleven billing period ratchet and not the
8 other?

9
10 **Response:**

11 The Company consulted with EES to provide the following response.

12 There are no costs related to the Waneta Expansion purchase in the Wires Charge. In ICG IR
13 1.8.1 the question asked about the billing ratchet in terms of the Waneta Expansion. Both the
14 question and response may have been unclear because the ratchet does not apply to the power
15 supply charges; therefore, the fixed costs of the Waneta expansion are not relevant to the
16 portion of the demand charge that does include a ratchet. Having surplus capacity related to
17 the Waneta Expansion would, in fact, suggest that there are fixed costs that cannot be avoided
18 if a customer reduces load. That would support a ratchet in the case of the power supply
19 demand charge, although FBC does not actually require a ratchet in that case.

20 A ratchet is applied to the wires demand charge because the FBC transmission system is
21 planned for and built on the basis of the peak loads, and allocated in the COSA on the basis of
22 the 2CP. If customers use less than their 2 CP amount in the shoulder months, FBC cannot
23 avoid any charges and still must recover the fixed costs of the system.

24 For power supply, FBC has the ability to purchase different amounts of power in different
25 months, or can in some cases sell surplus amounts in the market, to meet peak loads that vary
26 across the months. Because the costs are not fixed in the same way as the transmission costs,
27 the power supply demand charge does not include a ratchet provision.

28

FortisBC Inc. (FBC or the Company) 2017 Cost of Service Analysis and Rate Design Application (the Application)	Submission Date: July 10, 2018
Response to the Industrial Customers Group (ICG) Information Request (IR) No. 2	Page 22

1 **15.0 Reference: Exhibit B-15, ICG IR 1.11.8**

2 15.1 Please comment on whether FBC “cannot state what charges may or may not be
3 included” because FBC is not aware of such charges or because FBC is aware
4 of such charges but cannot publicly disclose such charges because FBC is
5 holding such charges confidential?
6

7 **Response:**

8 FBC does not have information on what terms and/or pricing may be included in agreements
9 between BC Hydro and IPPs with which it has an EPA.

10

11

12

13 15.2 Please file the complete record of the Order G-12-99 proceeding and any other
14 proceeding related to the harmonization of rates between BC Hydro and FBC?
15

16 **Response:**

17 The 1998 Rate Harmonization Process was initiated by the joint FBC-BC Hydro Application (the
18 Harmonization Application) submitted to the Commission on October 5, 1998 and concluded
19 with the G-12-99 Decision dated February 4, 1999. This was the process that established the
20 parameters for the harmonization of wheeling rates between FBC and BC Hydro.

21 While there is no list of exhibits for this process, and it does not appear on the Commission’s
22 website, FBC has located the following documents related to the Harmonization Application and
23 included as Attachment 15.2:

Document	Date	Description
1	5/10/1998	BC Hydro and West Kootenay Power Rate Harmonization Application
2	23/10/1998	BCUC Request for Comment on the Application Process
3	9/11/1998	WKP Reply to BCUC October 23 1998 Letter
4	9/11/1998	BCPIAC Reply to BCUC October 23 1998 Letter
5	3/12/1998	BCUC Information Request
6	6/1/1999	BC Hydro and West Kootenay Power response to BCUC Information Request
7	4/2/1999	Commission Order G-12-99 and Decision

24

25 In addition, although neither FBC nor BC Hydro were the Applicant in the process, the Company
26 is aware that the topic of rate harmonization did arise during the process that considered an

FortisBC Inc. (FBC or the Company) 2017 Cost of Service Analysis and Rate Design Application (the Application)	Submission Date: July 10, 2018
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1 Application by Riverside Forest Products Limited for an Exemption from Certain Provisions of
2 the Utilities Commission Act.

3 The record of this process is not available on the BCUC website, and since FBC was not the
4 Applicant, it does not possess the complete record. FBC is aware that Tolko Ltd (for which
5 Riverside was the predecessor company) filed the associated documents as part of the
6 FortisBC Inc. Application for a Certificate of Public Convenience and Necessity for the Purchase
7 of the Utility Assets of the City of Kelowna ~ Phase 2 process, and that document can be found
8 here [http://www.bcuc.com/Documents/Proceedings/2013/DOC_34592_C1-6_Tolko_Submitting-](http://www.bcuc.com/Documents/Proceedings/2013/DOC_34592_C1-6_Tolko_Submitting-Comments.pdf)
9 [Comments.pdf](http://www.bcuc.com/Documents/Proceedings/2013/DOC_34592_C1-6_Tolko_Submitting-Comments.pdf), with the relevant portion beginning at page 124 of the pdf. The 2001 Riverside
10 Application resulted in Commission Order G-113-01.

11

FortisBC Inc. (FBC or the Company) 2017 Cost of Service Analysis and Rate Design Application (the Application)	Submission Date: July 10, 2018
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1 **16.0 Reference: Exhibit B-15, ICG IR 1.16.1**

2 “First, and contrary to the point raised in the question, FBC does not expect to receive
3 any energy under RS 106, and may not be able to absorb additional energy into its
4 storage account if and when a positive imbalance was to occur, as FBC has no control
5 over the timing of the inadvertent deliveries. FBC submits an Annual Electric Contracting
6 Plan to the BCUC each year detailing its load and resource balance, and monitors it
7 continuously throughout the year. Unexpected inadvertent deliveries under RS 106 could
8 change FBC’s plan, resulting in lost market opportunities, or overfilling of the storage
9 accounts, both of which would pass on increased costs to other customers.

10 Second, FBC may be subject to penalties under its Imbalance Agreement with BC Hydro
11 if it is delivering too much energy into its system during periods of negative market
12 prices. If FBC does not charge customers for positive imbalances during periods of
13 negative market prices, it may provide a benefit to the transmission customer at the
14 expense of other customers.”

15 16.1 Please explain why it is not more logical and equitable to only pass along the
16 charge to the customer when the Mid-C price is negative only when FBC’s
17 storage accounts are full or when a penalty is incurred under the Imbalance
18 Agreement with BC Hydro?

19
20 **Response:**

21 The full response to ICG IR 1.16.1 explained that the transmission customer is responsible to
22 appropriately manage their schedules. Imbalance service is not a mechanism for a customer to
23 realize a better price than can be achieved on the market.

24 FBC manages its business to ensure that sufficient room remains such that unexpected system
25 conditions do not fill the storage accounts or result in imbalance penalties. Therefore, the
26 correct question is not how often do such circumstances occur, which are rare² due to FBC’s
27 active portfolio management, but how does FBC’s acquisition of imbalance energy at a time
28 determined by the customer impact FBC’s ability to manage electricity purchases?

29 Is it clear that if FBC acquires a MWh from a transmission customer due to imbalance transfers,
30 that represents 1 less MWh that FBC can acquire from the market at a time and price of FBC’s
31 choosing. Therefore, to fully hold all other customers whole, the price paid for imbalance
32 transfers ought to be the lowest possible price that FBC could have reasonably purchased that
33 energy for over the relevant time period (which could be as short as a few days or as long as
34 several months). However, FBC believes that as long as the transmission customer is not
35 rewarded to maximize the use of FBC imbalance (i.e. transfer large volumes to FBC through
36 imbalance if FBC imbalance were to pay more than the market), that the proposed imbalance

² FBC does not maintain a list of such events.

FortisBC Inc. (FBC or the Company) 2017 Cost of Service Analysis and Rate Design Application (the Application)	Submission Date: July 10, 2018
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1 rates strike a reasonable balance between all customers that can be reasonably managed by
2 FBC.

3

4

5

6 16.2 Please identify how often and when, in the past five years, FBC storage accounts
7 have been full or an Imbalance Agreement penalty has been incurred. In
8 situations where FBC incurs no additional costs, and in fact may actually receive
9 a benefit, why is also charging the customer fair, equitable, or logical?

10

11 **Response:**

12 Please refer to the response to ICG IR 2.16.1.

13

FortisBC Inc. (FBC or the Company) 2017 Cost of Service Analysis and Rate Design Application (the Application)	Submission Date: July 10, 2018
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1 **17.0 Reference: Exhibit B-15, ICG IR 1.18.1**

2 17.1 Please describe FBC's methodology or criteria for determining a satisfactory load
3 factor for potential RS 33 customer. Please be as specific as possible.

4
5 **Response:**

6 Please refer to the response to BCUC IR 2.133.2.

7

FortisBC Inc. (FBC or the Company) 2017 Cost of Service Analysis and Rate Design Application (the Application)	Submission Date: July 10, 2018
Response to the Industrial Customers Group (ICG) Information Request (IR) No. 2	Page 27

1 **18.0 Reference: Exhibit B-15, ICG IR 1.19.1**

2 “FBC is unable to update rows 46 to 56 of the COSA Worksheet with the 2017 actual
3 values since the breakdown used in the COSA is not the same as normally compiled by
4 the load forecasting department. 2017 actual load numbers are still in the process of
5 being verified, and then there is a considerable amount of work required to segment the
6 data as was done for the historic information used in the COSA.”

7 18.1 When will the 2017 actual values be available?

8

9 **Response:**

10 The 2017 actuals are available at this time but FBC is unable to update the COSA Worksheet
11 since it is very complex and would take over a month to fully update.

12

FortisBC Inc. (FBC or the Company) 2017 Cost of Service Analysis and Rate Design Application (the Application)	Submission Date: July 10, 2018
Response to the Industrial Customers Group (ICG) Information Request (IR) No. 2	Page 28

1 **19.0 Reference: Exhibit B-15, ICG IR 1.19.2**

2 “For purposes of the COSA, EES worked with both energy sales at the meter and total
3 system energy for each month. The difference between these two numbers was set as
4 the overall loss factor. EES then split the total losses between transmission, primary and
5 secondary based on standard differentials. This same loss factor was applied to peak
6 demands as well as energy. The goal in the COSA was to be able to allocate costs by
7 customer class based on their contribution to the system energy and demand
8 components. If EES had simply used sales data for allocating costs, the classes served
9 at transmission voltage would have been over-allocated costs relative to those served at
10 secondary voltage. Please refer to the response to BCUC IR 1.73.1 for a discussion of
11 the determination of the loss percentages.”

12 19.1 Please provide the actual values and the calculations used by EES in the
13 methodology described in the reference.

14
15 **Response:**

16 Please refer to the response to ICG IR 2.10.2.

17

FortisBC Inc. (FBC or the Company) 2017 Cost of Service Analysis and Rate Design Application (the Application)	Submission Date: July 10, 2018
Response to the Industrial Customers Group (ICG) Information Request (IR) No. 2	Page 29

1 **20.0 Reference: Exhibit B-15, ICG IR 1.20.1**

2 20.1 Please explain why there is no substation equipment associated with Lower
3 Bonnington or South Slocan generating stations assigned as generation-
4 integration.

5
6 **Response:**

7 In the case of Lower Bonnington, there is no separate transmission switching station at that
8 plant and hence the generator high-voltage (transmission) equipment is included in the
9 generation asset class. In the case of South Slocan, the associated substation is a separate
10 asset assigned to the transmission function (as the substation supports both transmission and
11 generation-integration) and hence the asset values are included in the transmission asset class.

12

Attachment 3.1

Harmonization

January 6, 1999

Mr. Robert J. Pellatt
Commission Secretary
British Columbia Utilities Commission
P.O. Box 250
600-900 Howe Street
Vancouver, B.C.
V6Z 2N3

Dear Mr. Pellatt:

**RE: British Columbia Hydro and Power Authority ("B.C. Hydro")
and West Kootenay Power Ltd. ("WKP") - Rate Harmonization**

We reply to your letter of December 3, 1998 as follows:

General Comment

B.C. Hydro and West Kootenay believe that rate harmonization is appropriate for the allocation of embedded costs since these costs are not affected by individual wheeling transactions. Rate harmonization is not appropriate for the additional costs caused by individual wheeling transactions.

Request No. 1

The proposal does not appear to address how transmission losses will be treated. This would appear to suggest that both B.C. Hydro and WKP will be charging for losses independently so that a customer accessing both systems will pay losses to both utilities.

Is this understanding of the proposal correct? If not, please clarify the proposal.

Have either B.C. Hydro or WKP undertaken any studies to determine whether the actual losses which would occur as a result of a customer using both systems are likely to be equal to the losses for which the customer will be charged assuming (i) WKP uses incremental losses, (ii) WKP uses its system's average losses? If yes, what were the results? If not, please indicate whether it is expected that the losses would be the same or different and, if different, in what direction the difference would be? (i.e. would the customer be likely to be charged for losses which did not actually occur)?

- 2 -

Response No. 1

Yes your understanding is correct. As indicated in the above General Comment it is appropriate to charge for losses on both systems since a wheeling transaction will cause losses on both the B.C. Hydro and WKP systems. B.C. Hydro and WKP would charge for these losses according to their respective WTS tariffs.

BCH and WKP have not done any studies to determine what the actual losses would be for various transactions. Loss calculations are very dependent on POD, POR location, time period etc. Presently neither B.C. Hydro nor WKP is aware of any customers that are planning to make use of WTS service. Hence any estimate of actual losses versus losses assessed under the respective Tariffs could only be based on purely hypothetical transactions and these can be easily constructed to show a variety of results.

The need to recover losses on both systems is not linked to the method of calculating the losses; i.e. on an average or incremental basis.

Request No. 2

The proposal does not appear to address the harmonization of ancillary services. As is the case with losses, this would appear to suggest that both B.C. Hydro and WKP will be charging for ancillary services independently so that a customer accessing both systems will pay for ancillary services on both systems

Is this understanding of the proposal correct? If not, please clarify the proposal.

For each of the ancillary services offered by B.C. Hydro or proposed to be offered or required by WKP, please explain why a customer who takes the ancillary service from one transmission provider should be required to take the ancillary service from the other provider as well. Specifically, please explain why the taking of each ancillary service from one provider will not be sufficient to meet the needs of the other provider.

Response No. 2

Yes and no. B.C. Hydro and WKP will charge for ancillary services independently. However, ancillary services do not have to be harmonized. The only Ancillary Services for which a customer would have to pay each utility are Scheduling, System Control and Dispatch (SSCD) and Reactive Supply and Voltage Control (RSVC). The SSCD function is required in each utility to complete the transaction and it's appropriate that the transaction attract this cost. When a Single System Operator for the WKP and B.C. Hydro transmission systems is in place a transaction will attract only one charge for SSCD.

RSVC is required in each utility's transmission system to ensure system reliability and is necessary to support wheeling transactions across each utility's transmission system. It is appropriate that a wheeling transaction across both utility systems pay the RSVC charge in each jurisdiction.

- 3 -

The Regulation and Frequency Response(RFR) and Operating Reserve(Spinning and Supplemental) Ancillary Services can be purchased from B.C. Hydro, WKP, a third party supplier or self-supplied. A customer having obtained these services satisfies the Tariff requirements of both utilities.

Energy Balancing can only be associated with the generator that provides the balancing power between the POR and the POD and would therefore only be charged once. The energy imbalance charge will be collected by the utility in whose service territory the load is located.

Request No. 3

Under the terms of the rate harmonization proposal, customers within WKP's service area will pay WKP's transmission charge but not B.C. Hydro's charge. In your letter, you state that because the net flow between the two service areas is likely to be into WKP's service area, the effect of the harmonization arrangements will be to reduce the responsibility of WKP customers who purchase energy from sources other than WKP for the embedded costs of the B.C. Hydro transmission system.

Has either WKP or B.C. Hydro undertaken any studies to quantify this effect? If yes, please provide the results.

To the extent that this effect occurs, the monies that would otherwise have been collected from these WKP customers will have to be collected from other B.C. Hydro customers.

Assuming that B.C. Hydro was not under a rate freeze, how would B.C. Hydro propose to collect these funds? Specifically, would the deficiency be collected entirely from B.C. Hydro native load customers or would B.C. Hydro's Wholesale Transmission Service rates also be adjusted?

In its November 9, 1998 letter to the Commission, the Bonneville Power Administration indicates that one option is the use of a Revenue Credit.

Has B.C. Hydro assessed this option? If so, what are the results?

Assuming the net flow between the two services areas reversed, how would WKP propose to collect any deficiency?

Response No. 3

B.C. Hydro has considered the potential revenue impact. The impact is sensitive to market prices since WKP's wholesale customer would only be expected to replace WKP's embedded Schedule 40 rate with purchases from suppliers other than WKP

- 4 -

when the cost of the supply plus WKP's wheeling rate is less than the WKP's Schedule 40. Market prices would have to be less than 2.4¢/kWh for this to occur. B.C. Hydro, WKP and the intervenors appear to believe this is unlikely.

If all of WKP wholesale customers opted to purchase from a supplier other than WKP then the maximum revenue loss to B.C. Hydro would be approximately \$8,000,000. If this were to occur then B.C. Hydro and West Kootenay would consider establishing a mechanism to collect the lost revenue from WKP customers, to the extent the loss was not offset by added margin from increased market sales.

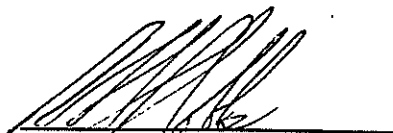
We understand the Revenue Credit mechanism includes the establishing of an account which reflects the lost B.C. Hydro Network Transmission Service revenue that would result if, for example, WKP wholesale customers choose to purchase from a supplier outside of WKP's service area rather than purchase from WKP. The amount included in the account would be added to WKP's transmission revenue requirement and deducted from BC Hydro's transmission revenue requirement. This was not considered.

Since WKP does not have a power sales contract with B.C. Hydro that could be displaced when B.C. Hydro's wholesale customers purchase energy from a supplier other than B.C. Hydro, an energy flow from WKP to B.C. Hydro would not reduce WKP's transmission revenues. Presently WKP's transmission revenue requirement is allocated to WKP's loads and this would continue even if an outflow of energy from WKP occurred. For example, a generator locating in WKP's service area and exporting its energy thereby creating net outflow from WKP would not reduce the revenues collected from loads within WKP's service area or affect WKP's WTS rates.

Yours very truly,



Darlene Cathcart
Senior Vice-President
Marketing & Customer Services
British Columbia Hydro
and Power Authority



Robert Hobbs
Director Regulatory and Government Affairs
West Kootenay Power Ltd.

Attachment 12.3

REFER TO LIVE SPREADSHEET MODEL

Provided in electronic format only

(accessible by opening the Attachments Tab in Adobe)

Attachment 13.1

REFER TO LIVE SPREADSHEET MODEL

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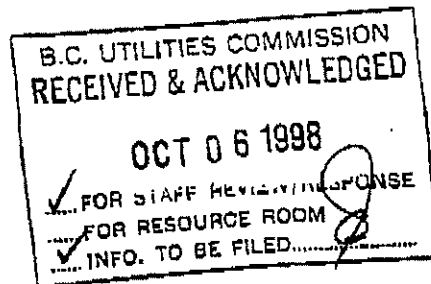
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Attachment 13.3

REFER TO LIVE SPREADSHEET MODEL

Provided in electronic format only

(accessible by opening the Attachments Tab in Adobe)



5 October, 1998

Mr. R.J. Pellatt
Commission Secretary
B.C. Utilities Commission
6th Floor, 900 Howe Street
Vancouver, B.C.
V6Z 2N3

Dear Mr. Pellatt:

**Re: British Columbia Hydro and Power Authority ("BC Hydro")
and West Kootenay Power Ltd. - Rate Harmonization**

B.C. Hydro and Power Authority ("B.C. Hydro") and West Kootenay Power Ltd. ("WKP") have jointly developed a proposal to include language within their respective transmission tariffs which will harmonize rates between their respective service areas. The purpose and effect of the amendments is to relieve wholesale transmission customers from the requirement to pay both B.C. Hydro's and WKP's wholesale transmission rate by charging only the wholesale transmission rate of the utility whose service area the customer is located within. As described below, the application proposes changes to the wholesale transmission schedules, and not the terms and conditions of access.

Attached as Appendix A are the proposed changes to B.C. Hydro's Schedules 3001 and 3002 which have been highlighted for your convenience. The attached Appendix B contains proposed changes to WKP's Schedules 101 and 102. The gist of these amendments is that for wheeling to points of interconnection between B.C. Hydro and West Kootenay Power, the wholesale transmission rate is set at zero.

WKP and B.C. Hydro agree that these harmonization arrangements should not influence WKP's decision as to whether to source energy under its existing power purchase agreement with B.C. Hydro (Rate Schedule 3808) or from alternative sources. Similarly B.C. Hydro's purchases from WKP under WKP's Rate Schedule 40 should not be influenced. To reflect this principle, the parties have agreed that the various power purchase agreements should be amended to include the additional terms found in the attached Appendix C.

The proposed changes to the power purchase agreements set out in Appendix C should ensure neutrality in WKP's and B.C. Hydro's evaluations of their supply alternatives in most foreseeable circumstances. However, if actual experience after harmonization is introduced leads either party to believe that WKP's or B.C. Hydro's supply decisions are being affected by the harmonization arrangements, the parties will work together to determine what further steps can be taken to ensure ongoing

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10/05/98, MON 15:23 FAX 604 623 4407 BCH-H&RR/FOI
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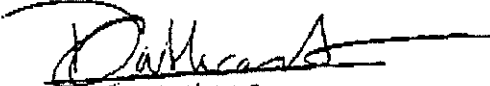
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- 2 -

neutrality. Failing agreement, either party may ask Commission approval of further changes as necessary but the parties agree that in any proceeding before the Commission, they will continue to support the principle of neutrality outlined in this letter.

The Commission should note that while the proposed arrangements are neutral as between B.C. Hydro and WKP, they are likely not neutral as between their respective ratepayers. Because the net flow between the two service areas is likely to be into WKP's service area, the effect of the harmonization arrangements will be to reduce the responsibility of WKP customers who purchase energy from sources other than WKP, for the embedded costs of the B.C. Hydro transmission system. WKP customers currently pay their share of those costs through the transmission component of the bundled Rate Schedule 3808. The reverse is true but has a smaller impact for B.C. Hydro's wholesale purchases from WKP. In B.C. Hydro's view the lack of neutrality is an unavoidable consequence of harmonization between the two systems and it will be for the Commission to determine whether the benefits of harmonization are sufficient to justify this impact.

Yours very truly,


Darlene Cathcart
Senior Vice-President
Marketing & Customer Services
British Columbia Hydro and Power Authority


Robert Hobbs
Direct Regulatory and Government Affairs
West Kootenay Power Ltd.

Attachments

c: Robert Hobbs

- 3 -

APPENDIX A

CHANGES TO B.C. HYDRO WHOLESALE TRANSMISSION SERVICE SCHEDULES

(Suggested language is shown shaded)

SCHEDULE 3001: LONG-TERM AND SHORT-TERM FIRM POINT TO POINT TRANSMISSION SERVICE

Rates for Long Term Firm Service

The Reserve Capacity Charge for the Long-Term Firm Service Rate will be up to a maximum price as set out below except where the POD is a point of interconnection between the Transmission System and the transmission system of West Kootenay Power Ltd., in which case the rate shall be zero (\$0.00).

Rates for Short Term Firm Service

The posted prices will be above a minimum price and below a maximum price as set out below except where the POD is a point of interconnection between the Transmission System and the transmission system of West Kootenay Power Ltd., in which case the rate shall be zero (\$0.00).

SCHEDULE 3002 - NON-FIRM POINT TO POINT TRANSMISSION SERVICE

Rates for Short Term Non-Firm Service

The Transmission Customer shall compensate B.C. Hydro each month for a Reserved Capacity designated at the POR at the posted prices which will be above the minimum price and below a maximum price as set out below except in all cases where the POD is a point of interconnection between the Transmission System and the transmission system of West Kootenay Power Ltd., in which case the rate shall be zero (\$0.00).

- 4 -

APPENDIX B

CHANGES TO WEST KOOTENAY POWER LTD. WHOLESALE TRANSMISSION SERVICE SCHEDULES

(Suggested language is shown shaded)

Original Sheet 71

SCHEDULE 101 - LONG-TERM AND SHORT-TERM FIRM POINT-TO-POINT TRANSMISSION SERVICE

Availability: For transmission of electricity on a firm basis from one or more
Point(s) of Receipt (POR) to one or more Point(s) of Delivery (POD).

Annual Rate for Long-Term Firm Service:

The Monthly Rate is billed on the sum of the Reserved Capacity at each POD. The
Monthly Rate will be zero (\$0.00) where the POD is a point of interconnection
between the Transmission System and the transmission system of B.C. Hydro and
Power Authority.

Monthly Rate:

Wholesale Service-Transmission

A customer charge of \$208 per POD to a maximum of \$208 in any calendar
month.

plus

\$2.24 per kVA of Reserved Capacity Billing Demand.

Wholesale Service-Primary

A customer charge of \$1,122 per POD to a maximum of \$1,122 in any
calendar month. plus

\$4.35 per kVA of Reserved Capacity Billing Demand.

Large General Service-Transmission

A customer charge of \$1,417 per POD to a maximum of \$1,417 in any
calendar month. plus

\$2.37 per kVA of Reserved Capacity Billing Demand.

- 5 -

APPENDIX B - Continued
CHANGES TO WEST KOOTENAY POWER LTD.
WHOLESALE TRANSMISSION SERVICE SCHEDULES

(Suggested language is shown shaded)

Original Sheet 72

SCHEDULE 10) - LONG-TERM AND SHORT-TERM FIRM POINT-TO-POINT
TRANSMISSION SERVICE (cont'd)

Rate for Short-Term Firm Service:

The posted prices will be above a minimum price and below a maximum price as set out below, except that the Monthly, Weekly, Daily or Hourly Rate, as applicable, will be zero (\$0.00) where the POD is a point of interconnection between the Transmission System and the transmission system of B.C. Hydro and Power Authority.

Minimum Price: \$0.002 per kW per hour plus the applicable customer charge.

Maximum Price:

The Transmission Customer shall pay each month for Reserved Capacity designated at the POD at rates not to exceed the applicable charges set forth below:

Monthly Delivery:

Wholesale Service-Transmission

A customer charge of \$208 per POD to a maximum of \$208 in any calendar month. plus
\$3.02 per kVA of Reserved Capacity Billing Demand.

Wholesale Service-Primary

A customer charge of \$1,122 per POD to a maximum of \$1,122 in any calendar month. plus
\$5.87 per kVA of Reserved Capacity Billing Demand.

Large General Service-Transmission

A customer charge of \$1,417 per POD to a maximum of \$1,417 in any calendar month. plus
\$3.20 per kVA of Reserved Capacity Billing Demand.

- 6 -

APPENDIX B - Continued
CHANGES TO WEST KOOTENAY POWER LTD.
WHOLESALE TRANSMISSION SERVICE SCHEDULES

(Suggested language is shown shaded)

Original Sheet 76

SCHEDULE 102 - NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE

Availability: For transmission of electricity on a Non-firm basis from one or more Point(s) of Receipt (POR) to one or more Point(s) of Delivery (POD).

Rates for Short-Term Non-Firm ServiceRate for Short-Term Non-Firm Service:

The Transmission Customer shall pay each month for Reserved Capacity designated at the POR at the posted prices which will be above a minimum price and below a maximum price as set out below.

Minimum Price: \$0.001 per kW per hour

Maximum Price:

The Transmission Customer shall pay for Non-Firm Point-to-Point Transmission Service at rates not to exceed the applicable charges set forth below; except that the Monthly, Weekly, Daily or Hourly Rate, as applicable, will be zero (\$0.00) where the POD is a point of interconnection between the Transmission System and the transmission system of B.C. Hydro and Power Authority.

Monthly DeliveryWholesale Service-Transmission

A customer charge of \$208 per POD to a maximum of \$208 in any calendar month, plus
 \$3.02 per kVA of Reserved Capacity Billing Demand.

Wholesale Service-Primary

A customer charge of \$1,122 per POD to a maximum of \$1,122 in any calendar month, plus
 \$5.87 per kVA of Reserved Capacity Billing Demand.

Large General Service-Transmission

A customer charge of \$1,417 per POD to a maximum of \$1,417 in any calendar month, plus
 \$3.20 per kVA of Reserved Capacity Billing Demand.

- 7 -

APPENDIX C

CHANGES TO POWER PURCHASE AGREEMENTS

WKP Purchases from B.C. Hydro

For the purposes of this clause, and this clause only, capitalized items shall have the same meaning as contained in B.C. Hydro's Tariff Supplement No. 30 - Terms and Conditions applicable to wholesale transmission service.

When the B.C. Hydro Transmission System is used by West Kootenay Power or an agent to transmit power purchased from any person other than B.C. Hydro to serve West Kootenay Power's Native Load Customers, to a Point of Interconnection or to the Point of Supply (as defined in the General Wheeling Agreement between B.C. Hydro and West Kootenay Power dated October 15, 1986), West Kootenay Power shall pay to B.C. Hydro an amount equal to the Hourly Price for Reserved Capacity which would have been payable for transmission of that energy under Rate Schedule 3001, times the amount of energy delivered.

B.C. Hydro Purchases from WKP

For the purposes of this clause, and this clause only, capitalized items shall have the same meaning as contained in West Kootenay Power's Tariff Supplement No. 7 Terms and Conditions applicable to wholesale transmission access.

When the West Kootenay Power Transmission System is used by B.C. Hydro or an agent to transmit power purchased from any person other than West Kootenay Power to serve B.C. Hydro's Native Load Customers at a point of interconnection, B.C. Hydro shall pay to West Kootenay Power an amount equal to the Hourly Price for Reserved Capacity which would have been payable for transmission of that energy under Rate Schedule 101 for Wholesale Service - Primary, times the amount of energy delivered.

ROBERT J. PELLATT
COMMISSION SECRETARY
Commission.Secretary@bcuc.com
web site: http://www.bcuc.com



SIXTH FLOOR, 900 HOWE STREET, BOX 250
VANCOUVER, B.C. CANADA V6Z 2N3
TELEPHONE: (604) 660-4700
BC TOLL FREE: 1-800-883-1385
FACSIMILE: (604) 660-1102

VIA FACSIMILE

October 23, 1998

Dear Registered Intervenor:

Re: British Columbia Hydro and Power Authority ("B.C. Hydro")
and West Kootenay Power Ltd. ("WKP") – Rate Harmonization

On October 5, 1998, B.C. Hydro and WKP jointly submitted a proposal to include language within their respective transmission tariffs which will harmonize rates between their service areas. The purpose and effect of the amendments is to relieve wholesale transmission customers from the requirement to pay both B.C. Hydro's and WKP's wholesale transmission rate by charging only the wholesale transmission rate of the utility within whose service area the customer is located.

In order to determine how to proceed in this matter, the Commission is requesting your views with respect to the following two questions no later than November 9, 1998. First, is a formal public hearing required to dispose of this matter? Second, is it acceptable to treat the rate harmonization proposal as an interim measure subject to review after two years based on the history of activities and the impacts on each utility?

A copy of the Rate Harmonization proposal is attached for your convenience.

Yours truly,

Robert J. Pellatt

DWE/yl

Attachment

cc: Ms. Darlene M. Cathcart
Senior Vice President, Marketing and Customer Services
British Columbia Hydro and Power Authority
Mr. R.H. Hobbs
Director, Regulatory and Government Affairs
West Kootenay Power Ltd.

BCH/Cor/WKP-BCH-WTS;WKP-TAA

PHH
981020
cc: G. Isherwood
R Siddall
B van Yzerloo

UTILICORP BRITISH COLUMBIA
ENERGY ONE

November 9, 1998

VIA FAX

Original to Follow

Mr. R. J. Pellatt
Commission Secretary
B. C. Utilities Commission
6th Floor, 900 Howe Street
Vancouver, B.C. V6Z 2N3

Re: Rate Harmonization

By letter dated October 23, 1998, the British Columbia Utilities Commission ("Commission") requested that Registered Intervenors make their views known on two issues regarding a proposal on Rate Harmonization jointly submitted to the Commission by West Kootenay Power Ltd. ("WKP") and British Columbia Hydro and Power Authority ("BC Hydro") on October 5, 1998. The two issues identified were:

- (1) is a formal public hearing required, and
- (2) is a two year interim period acceptable?

It is WKP's opinion, that should the Commission receive no input opposing the proposal, then no formal hearing process is required and the joint proposal should be implemented for a two year interim period.

Should other Registered Intervenors object to the adoption of the proposal, then WKP suggests that a written hearing process would be sufficient to dispose of the matter, as either a firm or interim measure.

Yours truly,



Robert Hobbs
Director Regulatory and
Government Affairs

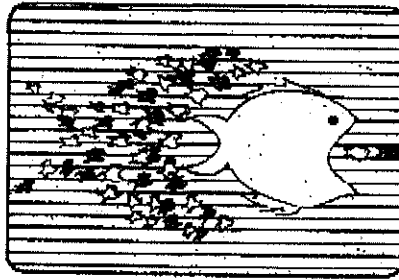
RHH98/1378.doc

981110
cc: G van Yzerloo
G Isherwood
R Siddall

File: 08523

**The
British Columbia
Public Interest
Advocacy Centre**

815-815 West Hastings Street
Vancouver, B.C. V6C 1B4
Tel: (604) 687-3063 Fax: (604) 682-7896
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Michael P. Doherty	687-3034
R.J. Gothercole	607-3000
Patricia MacDonald	687-3017
Judy Parrack	687-3044
James L. Guel	687-4134
Lynda Cassels (articled student)	687-3083
Barriers & Solicitors	

Via fax and mail: 660-1102

November 9, 1998

Robert J. Pellatt
Commission Secretary
B.C. UTILITIES COMMISSION
6th Floor - 900 Howe Street
Vancouver, B.C.
V6Z 2V3

Dear Mr. Pellatt:

Re: British Columbia Hydro and Power Authority ("B.C. Hydro") and West Kootenay Power Ltd. ("WKP") - Rate Harmonization

We represent the following clients: Consumers' Association of Canada (BC Branch), BC Old Age Pensioners' Organization, Council of Senior Citizens' Organizations of BC, federated anti-poverty groups of BC, Senior Citizens' Association of BC, End Legislated Poverty, West End Seniors' Network, Tenants' Rights Action Coalition and the Kootenay Okanagan Electric Consumers Association (collectively known as CAC(BC) *et al.*)

CAC(BC) *et al.* does not believe that a formal public hearing is required on this matter. Normally CAC(BC) *et al.* would support a public hearing where there are potential impacts on rate payers as discussed on page 2 of the letter of 5 October 1998 from Ms. Cathcart and Mr. Hobbs.

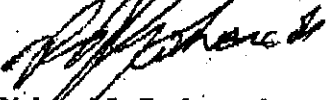
However, given the present relation between market rates and B.C. utility rates it is questionable to what extent wholesale transmission tariffs will be used. Under these circumstances it might be difficult to determine what rate impacts might be.

Robert J. Pellatt
November 9, 1998
Page 2

However, CAC(BC) *et al.* would prefer that the proposal be treated as an interim measure subject to review after one year, in case there is activity. If the situation is unchanged, the interim period could be extended.

Yours sincerely,

B.C. PUBLIC INTEREST ADVOCACY CENTRE



Richard J. Gathercole
Counsel for CAC(BC) *et al.*

→ cc: (via fax only) R. Hobbs, West Kootenay Power
Darlene Cathcart, B.C. Hydro

RJC:lj
p:\msoffice\dick\energy\7153\7153pell.let

DEC 08 1998



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VIA FACSIMILE

December 3, 1998

Ms. Darlene M. Cathcart
Senior Vice President
Marketing and Customer Services
British Columbia Hydro and
Power Authority
17th Floor, 333 Dunsmuir Street
Vancouver, B.C.
V6B 5R3

Mr. R.H. Hobbs, Director,
Regulatory and Government Affairs
West Kootenay Power Ltd.
1290 Esplanade
P.O. Box 130
Trail, B.C.
V1R 4L4

Dear Ms. Cathcart and Mr. Hobbs:

Re: British Columbia Hydro and Power Authority ("B.C. Hydro")
and West Kootenay Power Ltd ("WKP") – Rate Harmonization

Thank you for your letter of October 5, 1998 in which you jointly submitted a proposal to include language within your respective transmission tariffs which will harmonize rates between your service areas. In order to facilitate the Commission's disposition of this matter, Commission staff is making the following information request.

1. The proposal does not appear to address how transmission losses will be treated. This would appear to suggest that both B.C. Hydro and WKP will be charging for losses independently so that a customer accessing both systems will pay losses to both utilities.

Is this understanding of the proposal correct? If not, please clarify the proposal.

Have either B.C. Hydro or WKP undertaken any studies to determine whether the actual losses which would occur as a result of a customer using both systems are likely to be equal to the losses for which the customer will be charged assuming (i) WKP uses incremental losses, (ii) WKP uses its system's average losses? If yes, what were the results? If not, please indicate whether it is expected that the losses would be the same or different and, if different, in what direction the difference would be? (i.e. would the customer be likely to be charged for losses which did not actually occur)?

2. The proposal does not appear to address the harmonization of ancillary services. As is the case with losses, this would appear to suggest that both B.C. Hydro and WKP will be charging for ancillary services independently so that a customer accessing both systems will pay for ancillary services on both systems.

Is this understanding of the proposal correct? If not, please clarify the proposal.

For each of the ancillary services offered by B.C. Hydro or proposed to be offered or required by WKP, please explain why a customer who takes the ancillary service from one transmission provider should be required to take the ancillary service from the other provider as well. Specifically, please explain why the taking of each ancillary service from one provider will not be sufficient to meet the needs of the other provider.

3. Under the terms of the rate harmonization proposal, customers within WKP's service area will pay WKP's transmission charge but not B.C. Hydro's charge. In your letter, you state that because the net flow between the two service areas is likely to be into WKP's service area, the effect of the harmonization arrangements will be to reduce the responsibility of WKP customers who purchase energy from sources other than WKP for the embedded costs of the B.C. Hydro transmission system.

Has either WKP or B.C. Hydro undertaken any studies to quantify this effect? If yes, please provide the results.

To the extent that this effect occurs, the monies that would otherwise have been collected from these WKP customers will have to be collected from other B.C. Hydro customers.

Assuming that B.C. Hydro was not under a rate freeze, how would B.C. Hydro propose to collect these funds? Specifically, would the deficiency be collected entirely from B.C. Hydro native load customers or would B.C. Hydro's Wholesale Transmission Service rates also be adjusted?

In its November 9, 1998 letter to the Commission, the Bonneville Power Administration indicates that one option is the use of a Revenue Credit.

Has B.C. Hydro assessed this option? If so, what are the results?

Assuming the net flow between the two services areas reversed, how would WKP propose to collect any deficiency?

Staff requests a response by Monday, January 3, 1999.

Yours truly,



D.W. Emes
Manager, Strategic Services

DWE/ssc

Harmonization

January 6, 1999

Mr. Robert J. Pellatt
Commission Secretary
British Columbia Utilities Commission
P.O. Box 250
600-900 Howe Street
Vancouver, B.C.
V6Z 2N3

Dear Mr. Pellatt:

**RE: British Columbia Hydro and Power Authority ("B.C. Hydro")
and West Kootenay Power Ltd. ("WKP") - Rate Harmonization**

We reply to your letter of December 3, 1998 as follows:

General Comment

B.C. Hydro and West Kootenay believe that rate harmonization is appropriate for the allocation of embedded costs since these costs are not affected by individual wheeling transactions. Rate harmonization is not appropriate for the additional costs caused by individual wheeling transactions.

Request No. 1

The proposal does not appear to address how transmission losses will be treated. This would appear to suggest that both B.C. Hydro and WKP will be charging for losses independently so that a customer accessing both systems will pay losses to both utilities.

Is this understanding of the proposal correct? If not, please clarify the proposal.

Have either B.C. Hydro or WKP undertaken any studies to determine whether the actual losses which would occur as a result of a customer using both systems are likely to be equal to the losses for which the customer will be charged assuming (i) WKP uses incremental losses, (ii) WKP uses its system's average losses? If yes, what were the results? If not, please indicate whether it is expected that the losses would be the same or different and, if different, in what direction the difference would be? (i.e. would the customer be likely to be charged for losses which did not actually occur)?

- 2 -

Response No. 1

Yes your understanding is correct. As indicated in the above General Comment it is appropriate to charge for losses on both systems since a wheeling transaction will cause losses on both the B.C. Hydro and WKP systems. B.C. Hydro and WKP would charge for these losses according to their respective WTS tariffs.

BCH and WKP have not done any studies to determine what the actual losses would be for various transactions. Loss calculations are very dependent on POD, POR location, time period etc. Presently neither B.C. Hydro nor WKP is aware of any customers that are planning to make use of WTS service. Hence any estimate of actual losses versus losses assessed under the respective Tariffs could only be based on purely hypothetical transactions and these can be easily constructed to show a variety of results.

The need to recover losses on both systems is not linked to the method of calculating the losses; i.e. on an average or incremental basis.

Request No. 2

The proposal does not appear to address the harmonization of ancillary services. As is the case with losses, this would appear to suggest that both B.C. Hydro and WKP will be charging for ancillary services independently so that a customer accessing both systems will pay for ancillary services on both systems

Is this understanding of the proposal correct? If not, please clarify the proposal.

For each of the ancillary services offered by B.C. Hydro or proposed to be offered or required by WKP, please explain why a customer who takes the ancillary service from one transmission provider should be required to take the ancillary service from the other provider as well. Specifically, please explain why the taking of each ancillary service from one provider will not be sufficient to meet the needs of the other provider.

Response No. 2

Yes and no. B.C. Hydro and WKP will charge for ancillary services independently. However, ancillary services do not have to be harmonized. The only Ancillary Services for which a customer would have to pay each utility are Scheduling, System Control and Dispatch (SSCD) and Reactive Supply and Voltage Control (RSVC). The SSCD function is required in each utility to complete the transaction and it's appropriate that the transaction attract this cost. When a Single System Operator for the WKP and B.C. Hydro transmission systems is in place a transaction will attract only one charge for SSCD.

RSVC is required in each utility's transmission system to ensure system reliability and is necessary to support wheeling transactions across each utility's transmission system. It is appropriate that a wheeling transaction across both utility systems pay the RSVC charge in each jurisdiction.

- 3 -

The Regulation and Frequency Response(RFR) and Operating Reserve(Spinning and Supplemental) Ancillary Services can be purchased from B.C. Hydro, WKP, a third party supplier or self-supplied. A customer having obtained these services satisfies the Tariff requirements of both utilities.

Energy Balancing can only be associated with the generator that provides the balancing power between the POR and the POD and would therefore only be charged once. The energy imbalance charge will be collected by the utility in whose service territory the load is located.

Request No. 3

Under the terms of the rate harmonization proposal, customers within WKP's service area will pay WKP's transmission charge but not B.C. Hydro's charge. In your letter, you state that because the net flow between the two service areas is likely to be into WKP's service area, the effect of the harmonization arrangements will be to reduce the responsibility of WKP customers who purchase energy from sources other than WKP for the embedded costs of the B.C. Hydro transmission system.

Has either WKP or B.C. Hydro undertaken any studies to quantify this effect? If yes, please provide the results.

To the extent that this effect occurs, the monies that would otherwise have been collected from these WKP customers will have to be collected from other B.C. Hydro customers.

Assuming that B.C. Hydro was not under a rate freeze, how would B.C. Hydro propose to collect these funds? Specifically, would the deficiency be collected entirely from B.C. Hydro native load customers or would B.C. Hydro's Wholesale Transmission Service rates also be adjusted?

In its November 9, 1998 letter to the Commission, the Bonneville Power Administration indicates that one option is the use of a Revenue Credit.

Has B.C. Hydro assessed this option? If so, what are the results?

Assuming the net flow between the two services areas reversed, how would WKP propose to collect any deficiency?

Response No. 3

B.C. Hydro has considered the potential revenue impact. The impact is sensitive to market prices since WKP's wholesale customer would only be expected to replace WKP's embedded Schedule 40 rate with purchases from suppliers other than WKP

- 4 -

when the cost of the supply plus WKP's wheeling rate is less than the WKP's Schedule 40. Market prices would have to be less than 2.4¢/kWh for this to occur. B.C. Hydro, WKP and the intervenors appear to believe this is unlikely.

If all of WKP wholesale customers opted to purchase from a supplier other than WKP then the maximum revenue loss to B.C. Hydro would be approximately \$8,000,000. If this were to occur then B.C. Hydro and West Kootenay would consider establishing a mechanism to collect the lost revenue from WKP customers, to the extent the loss was not offset by added margin from increased market sales.

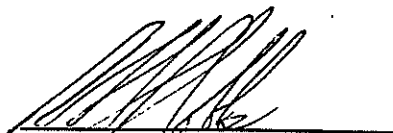
We understand the Revenue Credit mechanism includes the establishing of an account which reflects the lost B.C. Hydro Network Transmission Service revenue that would result if, for example, WKP wholesale customers choose to purchase from a supplier outside of WKP's service area rather than purchase from WKP. The amount included in the account would be added to WKP's transmission revenue requirement and deducted from BC Hydro's transmission revenue requirement. This was not considered.

Since WKP does not have a power sales contract with B.C. Hydro that could be displaced when B.C. Hydro's wholesale customers purchase energy from a supplier other than B.C. Hydro, an energy flow from WKP to B.C. Hydro would not reduce WKP's transmission revenues. Presently WKP's transmission revenue requirement is allocated to WKP's loads and this would continue even if an outflow of energy from WKP occurred. For example, a generator locating in WKP's service area and exporting its energy thereby creating net outflow from WKP would not reduce the revenues collected from loads within WKP's service area or affect WKP's WTS rates.

Yours very truly,



Darlene Cathcart
Senior Vice-President
Marketing & Customer Services
British Columbia Hydro
and Power Authority



Robert Hobbs
Director Regulatory and Government Affairs
West Kootenay Power Ltd.



BRITISH COLUMBIA
UTILITIES COMMISSION

ORDER
NUMBER G-12-99

TELEPHONE: (604) 660-4700
BC TOLL FREE: 1-800-663-1385
FACSIMILE: (604) 660-1102

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

and

Applications by West Kootenay Power Ltd.
and British Columbia Hydro and Power Authority
for Approval of Rate Harmonization on their Transmission Systems

BEFORE: P. Ostergaard, Chair)
L.R. Barr, Deputy Chair)
K.L. Hall, Commissioner) January 28, 1999
F.C. Leighton, Commissioner)

O R D E R

WHEREAS:

- A. The Commission, by Order No. G-29-98, set down a Pre-hearing Conference on West Kootenay Power Ltd.'s ("WKP") then-current Transmission Access Application. During the April 23, 1998 Pre-hearing Conference, attendees identified the need for harmonizing the transmission wheeling rates between WKP and British Columbia Hydro and Power Authority ("B.C. Hydro"). The objective of harmonization is to eliminate rate stacking or "pancaking" – that is, the payment by customers of two transmission wheeling tariffs on transactions where power is moved between utility service areas; and
- B. By Letter No. L-19-98, the Commission directed that WKP and B.C. Hydro should work together to develop suitable arrangements and to issue a joint proposal. In the event that no agreement could be reached, then separate proposals were to be filed by each utility. Letter No. L-68-98 extended the date by which the proposals should be filed; and
- C. On October 5, 1998, B.C. Hydro and WKP jointly applied to the Commission for approval of a Rate Harmonization proposal to harmonize transmission wheeling rates between their respective service areas. The effect of the proposed tariff and power purchase agreement amendments is to relieve transmission service customers from the requirement to pay both B.C. Hydro's and WKP's transmission wheeling rates by charging only the transmission service rate of the utility within whose service area the customer taking service is located; and
- D. On October 23, 1998, the Commission wrote to intervenors registered in either of B.C. Hydro's or WKP's open access proceedings, to elicit views on the disposition of the harmonization proposal; and

BRITISH COLUMBIA
UTILITIES COMMISSION

ORDER
NUMBER G-12-99

2

- E. On December 3, 1998, the Commission provided an information request to B.C. Hydro and WKP to which they jointly responded on January 6, 1999; and
- F. The Commission has reviewed the joint proposal between WKP and B.C. Hydro and finds that it should be approved and Reasons for Decision issued.

NOW THEREFORE the Commission orders as follows:

1. The Commission approves the joint B.C. Hydro/WKP rate harmonization proposal subject to review after two years, effective immediately. Reasons for Decision are attached as Appendix A to this Order.
2. B.C. Hydro and WKP are directed to file amended electric tariffs reflecting this decision.
3. B.C. Hydro and WKP are to provide copies of the approved tariffs, this Order and Reasons for Decision to all known participants and interested parties on this matter.

DATED at the City of Vancouver, in the Province of British Columbia, this *4th* day of February 1999.

BY ORDER



Peter Ostergaard
Chair

Attachment

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY AND WEST KOOTENAY POWER LTD.
TRANSMISSION RATE HARMONIZATION APPLICATION

REASONS FOR DECISION

1.0 INTRODUCTION

1.1 Background

On April 23, 1998, a pre-hearing conference was held regarding West Kootenay Power Ltd.'s ("WKP") then-current Transmission Access Application. At that conference, discussions took place among WKP, the British Columbia Hydro and Power Authority ("B.C. Hydro"), the British Columbia Utilities Commission ("Commission") staff, and other participants concerning the need to harmonize transmission wheeling rates between WKP and B.C. Hydro. The objective of harmonization is to eliminate rate stacking or "pancaking" — that is, the payment by customers of two transmission wheeling tariffs on transactions where power is moved between utility service areas.

During the pre-hearing conference, there appeared to be agreement that transmission wheeling rate harmonization was desirable, and that WKP and B.C. Hydro should work together to craft a suitable arrangement. By Letter No. L-19-98, the Commission directed WKP and B.C. Hydro to file, by September 18, 1998, a joint letter outlining their common proposal. In the event that no agreement could be reached by that date, separate letters were to be filed by each utility. By Letter No. L-68-98, the Commission granted an extension of the September 18th deadline to October 2, 1998.

On October 5, 1998, B.C. Hydro and WKP filed a joint transmission wheeling rate harmonization proposal with the Commission. On October 23, 1998, the Commission wrote to intervenors registered in either of B.C. Hydro's or WKP's open access proceedings to elicit views on the disposition of the rate harmonization proposal. In particular, the Commission asked about the need for a formal public hearing and about the acceptability of approval, subject to review after two years. Any responses were to be received by November 9, 1998.

The Interior Municipal Electrical Utilities, the Consumers Association of Canada (BC Branch) et al ("CAC(BC)"), the Bonneville Power Administration, WKP, and the Industrial Customers all agreed that a formal public hearing into this issue was not warranted at this time. In addition, all parties except the CAC(BC) supported adopting the proposal, subject to review after two years. The CAC(BC) argued for a review after just one year.

1.2 Description of the Application

B.C. Hydro and WKP have proposed to harmonize their transmission wheeling rates using a "license plate" approach. Under such a scheme, the transmission customer is charged only the transmission wheeling rate of the utility within whose service territory the customer is located. To accomplish this, WKP's Rate Schedules 101 and 102 and B.C. Hydro's Rate Schedules 3001 and 3002 would be amended so that the transmission rate is set at zero for wheeling to points of interconnection between the two Utilities.

Amendments to various power purchase agreements are also proposed to ensure that electricity trade between the two Utilities is not favoured relative to other suppliers, by the absence of a wheeling charge on energy bought under either B.C. Hydro's Rate Schedule 3808 or WKP's Rate Schedule 40. No changes are needed to the terms and conditions of access for either Utility.

2.0 ISSUES FOR CONSIDERATION

This Application has raised two major areas for Commission consideration. First, the Commission has sought to ensure that the license plate approach to harmonization is appropriate for the provincial circumstance. Second, the Commission has evaluated the prospect of extending harmonization beyond just transmission rates, and into the areas of transmission losses and ancillary services.

2.1 The License Plate Approach

The license plate approach to harmonization can create a transfer of revenue responsibility between the ratepayers of participating utilities. Since most open access transactions in B.C. are expected to run from the B.C. Hydro system to the WKP system, and since these transactions will tend to displace Rate Schedule 3808 transactions – through which WKP ratepayers make their contribution to the B.C. Hydro transmission system – there is likely to be a net transfer of cost responsibility for the B.C. Hydro system

toward B.C. Hydro ratepayers and away from WKP ratepayers. B.C. Hydro describes this lack of neutrality as an unavoidable consequence of harmonization between the two systems.

The extent of this revenue shift would be determined by market prices, since WKP's eligible transmission customers would only leave the Utility's embedded-cost supply when the delivered market price is below WKP's Schedule 40 rate. According to B.C. Hydro and WKP, this would require a market price of less than 2.4 cents per kWh, which the Utilities hold to be unlikely.

For perspective, the extreme case of all WKP's wholesale customers switching to suppliers other than WKP would produce an \$8 million revenue loss for B.C. Hydro. In such a case, B.C. Hydro and WKP have said that they would consider establishing a mechanism to collect the lost revenue from WKP customers, where such losses could not be offset by margins from increased market sales.

2.2 Commission Determinations

The Commission supports a license plate approach for its simplicity. As well, the Commission sees few problems with its application as long as the use of wheeling tariffs is relatively low. Still, the license plate approach is probably not a harmonization method that could survive indefinitely, since in a high-use environment the shifting of revenue responsibility would reach unacceptable levels.

Therefore, the Commission accepts that a license plate approach to transmission wheeling rate harmonization is appropriate, subject to review after two years.

2.3 Loss and Ancillary Services Harmonization

Questions have been raised, notably by the Industrial Customers, about the harmonization of losses, something that is not a part of the current proposal. In particular, the Industrial Customers assert that summing the line losses of both Utilities for a cross-boundary transaction would lead to an over recovery of losses (the Industrial Customers argue that if the average losses on each system are 7 percent, for example, then the average losses on a combined system would also be 7 percent, so charging a joint 14 percent is inappropriate). As such, the Industrial Customers have asked the Commission to instruct the Utilities to eliminate this "double recovery".

B.C. Hydro and WKP have stated their belief that rate harmonization is appropriate only for the allocation of embedded costs, since these costs are not affected by individual wheeling transaction. Rate harmonization is not appropriate where additional costs are caused by individual wheeling transactions. The Utilities assert that wheeling transactions impose real line losses on both Utilities, and should correctly be additive – not, as the Industrial Customers appear to suggest, averaged across both systems.

The Utilities take a similar position with respect to ancillary services, suggesting that each utility should charge for the ancillary services that it provides. B.C. Hydro and WKP state, however, that only Scheduling, System Control and Dispatch (“SSCD”) and Reactive Supply and Voltage Control (“RSVC”) would need to be purchased from both Utilities.

2.4 Commission Determinations

The Commission agrees with the Utilities’ position on harmonizing losses and ancillary services. While the average loss rate on a combined WKP/B.C. Hydro system may not be exactly the sum of the individual loss rates, it would not simply be the average of the two rates, either. In any case, a postage stamp approach to losses makes no representations of capturing the real losses of any given transaction, so any inaccuracies created by failing to harmonize system losses are unlikely to be unique in either kind or scope.

Considering that the permanency of a license plate approach to harmonization is open to question, the Commission does not support the investment of further resources to modify the existing proposal. Specifically, attempting what would be a quite complex harmonization of losses does not seem to be a useful expenditure of utility or intervenor resources at this time.

As such, the Commission approves, subject to review after two years, the changes identified as Appendices A, B, and C in the October 5, 1998 Application from WKP and B.C. Hydro.