



FOR GENERATIONS

Joanna Sofield

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December 21, 2010

Ms. Erica M. Hamilton
Commission Secretary
British Columbia Utilities Commission
Sixth Floor – 900 Howe Street
Vancouver, BC V6Z 2N3

Dear Ms. Hamilton:

**RE: British Columbia Utilities Commission (BCUC)
British Columbia Hydro and Power Authority (BC Hydro)
Residential Inclining Block (RIB) Rate Re-pricing Application**

BC Hydro encloses, pursuant to sections 58 to 61 of the *Utilities Commission Act*, its RIB Rate Re-pricing Application in which BC Hydro is requesting approval of a pricing principle for its RIB rate, to be effective April 1, 2011.

For further information, please contact Fred James at 604-623-4317 or by e-mail at bhydroregulatorygroup@bchydro.com.

Yours sincerely,

A handwritten signature in black ink, appearing to read "J. Sofield".

Joanna Sofield
Chief Regulatory Officer

dr/ma

Enclosure (1)

Copy to: BCUC Project No. 3698504 (2008 RIB Rate Application) Registered Intervener
Distribution List.

**Residential Inclining Block Rate
Re-pricing Application**



December 2010

Table of Contents

1	Introduction	1
1.1	Regulatory Context and Relief Sought	1
1.2	New Information Regarding BC Hydro's LRMC of New Supply	2
1.3	Application Scope	3
2	Rationale for Proposed RIB Rate Pricing Principles	3
2.1	Customer Bill Impact	3
2.2	Conservation Impact	6
2.3	Forecast Future RRA Increases	8
2.4	Revenue Neutrality	9
3	Regulatory Review and Reporting	9
3.1	Review Timetable	9
3.2	Annual Compliance Filing	9
3.3	RIB Rate Report	9
3.4	Contact Information	11

List of Figures

Figure 1	RIB Energy Rates under BC Hydro Proposed Pricing Principle.....	4
Figure 2	RIB Energy Rates under Alternative Pricing Principle (CARC + 10 per cent).....	4
Figure 3	RIB Rate Conservation under Proposed Pricing Principle	7
Figure 4	RIB Rate Conservation under Alternative Pricing Principle (CARC + 10 per cent).....	7

List of Tables

Table 1	Bill Impact of BC Hydro Proposed RIB Rate Pricing Principle	5
Table 2	Bill Impact of Alternative (CARC + 10 per cent) RIB Rate Pricing Principle	6

List of Appendices

Appendix A	Draft Order
Appendix B	Modelling Assumptions

1 **1 Introduction**

2 BC Hydro is filing this application to request approval of a pricing principle for its Residential
3 Inclining Block (**RIB**) rate to be effective in F2012 (commencing April 1, 2011) and subsequent
4 years as described further in section 1.1. “Pricing principle” refers to the manner in which
5 general rate increases are applied to the three pricing elements of the RIB rate, namely the
6 Step-1 energy rate, the Step-2 energy rate, and the Basic Charge.

7 **1.1 Regulatory Context and Relief Sought**

8 BC Hydro’s RIB rate was approved by BCUC Order No. G-124-08 and made effective on
9 October 1, 2008, with approval of a pricing principle for only two years, F2009 and F2010.¹ On
10 March 3, 2010, BC Hydro requested approval for a revised pricing principle for F2011, under
11 which the F2011 Revenue Requirement Application (**F11 RRA**) rate increase would be applied
12 to each of the three pricing elements of the RIB rate.² At the same time and in anticipation of
13 new information regarding its long run marginal cost (**LRMC**) of new supply, BC Hydro also
14 declared its intention to file a RIB rate re-pricing application before F2012. In the subsequent
15 Order No. G-47-10, issued on March 15, 2010, the BCUC granted approval for BC Hydro to
16 apply its interim F2011 rate increase uniformly across the RIB rate Basic Charge, the Step-1
17 rate, and Step-2 rate, as requested. The F11 RRA, and the F2011 pricing principle applicable
18 to the RIB rate, were resolved through the BCUC’s final approval of the F11 RRA negotiated
19 settlement agreement (**NSA**).³

20 In this application, BC Hydro proposes that the pricing principle approved in BCUC Order
21 Nos. G-47-10 and G-180-10 in regard to F2011 be sustained until such time as circumstances
22 require that it be re-visited, and in any case no sooner than the final resolution of BC Hydro’s
23 Time-of-Use (**TOU**) rate application (which is currently under development) and government’s
24 approval of BC Hydro’s 2011 Integrated Resource Plan (**2011 IRP**). That is, BC Hydro seeks
25 an order allowing it to continue to apply revenue requirement rate increases to each of the RIB
26 rate’s Basic Charge, Step-1 energy rate, and Step-2 energy rate, as was done in F2011. A
27 draft form of the order is attached as Appendix A.

¹ BCUC Order No. G-124-08 was issued on August 28, 2008.

² F11 RRA, Appendix A1 (filed March 3, 2010).

³ BCUC Order No. G-180-10 was issued on December 2, 2010.

1 **1.2 New Information Regarding BC Hydro’s LRMC of New Supply**

2 BC Hydro’s conservation rates have consistently used, and the BCUC has consistently
3 approved, the levelized weighted-average plant-gate price of BC Hydro’s most recent call for
4 energy as a proxy for its LRMC, for conservation rate purposes. In particular, the transmission
5 service stepped rate (RS 1823) Tier 2 rate was initially set at 5.4 cents/kWh, on April 1, 2006,
6 based on the then-latest province-wide Call for Tenders. Subsequently, when the final results
7 of the F2006 Call for Tenders (**F2006 CFT**) were available, with a levelized weighted-average
8 plant-gate price of 7.36 cents/kWh, the BCUC approved an increase in the RS 1823 Tier 2 rate
9 to 7.36 cents/kWh (BCUC Order No. G-97-08).

10 BC Hydro’s 2008 RIB rate application also used the F2006 CFT as the LRMC upon which the
11 Step-2 RIB rate would be based (grossed up to account for line losses). The BCUC approved
12 the use of the F2006 CFT results as the basis for the Step-2 energy rate, and also directed
13 that:

14 “...when circumstances dictate, BC Hydro must file an application to
15 change its estimate of the cost of new supply and to include in that
16 application a proposal of how to phase in the change, so that the
17 allocation of revenue requirement increases between the Step-1 and
18 Step-2 rates will be reviewed on a case by case basis each time
19 BC Hydro makes an application to change its estimate of the cost of new
20 supply.”⁴

21 The F2006 CFT was also the basis for the Part 2 marginal energy rate in the recently approved
22 negotiated settlement of BC Hydro’s Large General Service Rate Application.⁵

23 On August 3, 2010 BC Hydro published a report on its recent 2009 Clean Power Call
24 (**2009 CPC and CPC Report**), BC Hydro’s most recent open call for power.⁶ The CPC Report
25 indicates that the levelized weighted-average plant-gate price for firm energy arising from the
26 2009 CPC is 11.1 cents/kWh, in F2009 dollars. Grossed up for line losses, the results of the
27 2009 CPC indicate that the RIB Step-2 energy rate could be increased to as high as
28 13.2 cents/kWh on April 1, 2011, in accordance with the principles and practices established
29 since the implementation of the transmission service stepped rate. Under the pricing principle

⁴ BCUC Order No. G-124-08, page 108.

⁵ BCUC Order No. G-110-10, June 29, 2010 (also grossed up for line losses and adjusted for inflation)

⁶ *Clean Power Call – Request for Proposals: Report on the RFP Process*, August 3, 2010, at http://www.bchydro.com/etc/medialib/internet/documents/planning_regulatory/acquiring_power/2010q3/cpc_rfp_process_report.Par.0001.File.CPC_RFP_Process_Report_August_3_2010.pdf.

1 proposed in this application, the RIB Step-2 energy rate would equal the 2009 CPC-based
2 LRMC in approximately seven years.⁷

3 **1.3 Application Scope**

4 BC Hydro does not, in this application, revisit the many issues that were tested in the initial RIB
5 rate proceeding including, for example, the rationale for a conservation rate structure, the
6 Step-1 Threshold, and exemptions from the rate structure. Instead, this application is restricted
7 solely to RIB rate re-pricing, in accordance with BCUC Order No. G-124-08.

8 **2 Rationale for Proposed RIB Rate Pricing Principles**

9 **2.1 Customer Bill Impact**

10 For a number of years BC Hydro has employed a bill impact threshold, for rate design
11 purposes, of the class average rate change (**CARC**)⁸ plus 10 per cent (**CARC + 10 per cent**).
12 That is, BC Hydro has used a bill impact of CARC + 10 per cent on the single most adversely
13 impacted customer as a limiting factor in its rate design models.⁹ Employing
14 CARC + 10 per cent as the foundation of the pricing principle in the context of this application
15 would mean increasing the Step-2 energy rate by an amount greater than the applicable
16 revenue requirement increase up to the point that a single customer would have a bill impact
17 equal to the CARC + 10 per cent limit; increasing the Step-1 rate by less than the applicable
18 revenue requirement increase to ensure revenue neutrality; and doing so every year until the
19 Step-2 energy rate was increased to the LRMC.

20 The advantage of using the CARC + 10 per cent bill impact limit as the basis of a pricing
21 principle is a relatively quick increase in the Step-2 energy rate to BC Hydro's LRMC. Given no
22 further information regarding LRMC beyond the 2009 CPC, a CARC + 10 per cent pricing
23 principle would result in a Step-2 energy rate equal to LRMC by F2014, or an effective
24 phase-in period of three years.¹⁰ Figures 1 and 2 below show the Step-1 and Step-2 energy

⁷ All modelling assumptions are set out in Appendix B.

⁸ Class average rate changes (**CARC**) can arise from any or all of the following: revenue requirement changes, rate rider changes, and cost of service rate re-balancing.

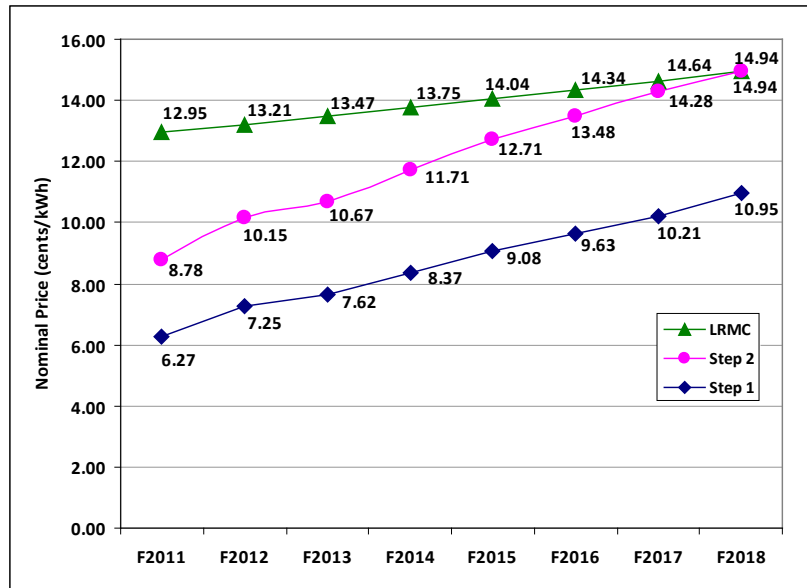
⁹ The BCUC has neither rejected this bill impact threshold, nor accepted it.

¹⁰ For the purpose of modelling this scenario, BC Hydro increased the Basic Charge annually by the amount of the general rate increase.

1 rates over a seven-year period, assuming both BC Hydro's proposed pricing principle
 2 (**Proposed**) and the alternative CARC + 10 per cent pricing principle. It is apparent that the
 3 CARC + 10 per cent pricing principle would result in a quicker increase in the Step-2 energy
 4 rate than the Proposed pricing principle.

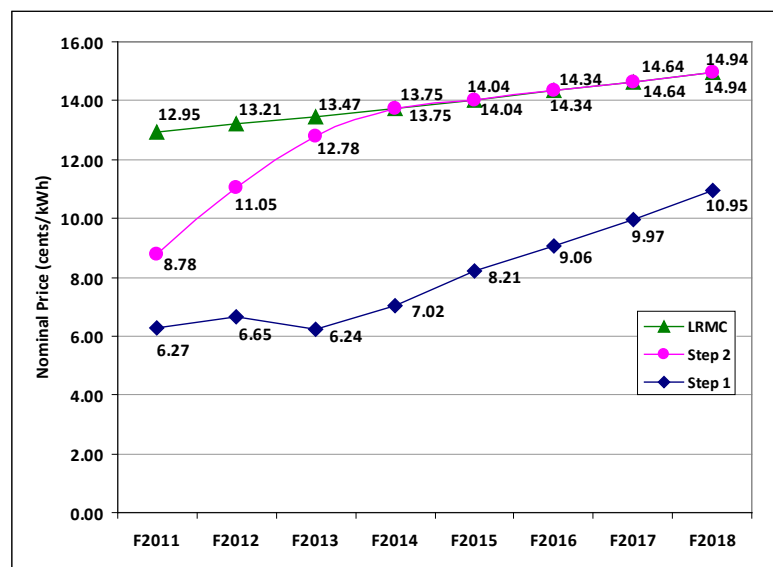
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Figure 1 RIB Energy Rates under BC Hydro Proposed Pricing Principle



7
8

Figure 2 RIB Energy Rates under Alternative Pricing Principle (CARC + 10 per cent)



1 However, the disadvantage of using the CARC + 10 per cent pricing principle is the
 2 consequential distribution of bill impacts. In particular, larger-consuming customers would have
 3 total annual bill increases greater than the applicable revenue requirement increase, and
 4 smaller customers would have total bill increases less than the applicable revenue requirement
 5 increase, during the phase-in of the Step-2 price to LRMC.

6 Table 1 illustrates that in each year under the Proposed pricing principle, all residential
 7 customers would experience a bill impact that is equal to the assumed annual revenue
 8 requirement rate increase (as indicated in each year by the bolded line in the tables below).

9 **Table 1 Bill Impact of BC Hydro Proposed RIB Rate**
 10 **Pricing Principle**

Bill Impact Range > <=	F2012	F2013	F2014	F2015	F2016	F2017	F2018
> 25.0% <= 27.5%							
> 22.5% <= 25.0%							
> 20.0% <= 22.5%							
> 17.5% <= 20.0%							
> 15.61% <= 17.5%							
> 9.73% <= 15.61%	100.0%						
> 8.58% <= 9.73%			100.0%				
> 6.00% <= 8.58%				100.0%			
> 5.17% <= 6.00%					100.0%	100.0%	100.0%
> 2.5% <= 5.17%		100.0%					
> 0.0% <= 2.5%							
> -2.5% <= 0.0%							
> -5.0% <= -2.5%							
> -10.0% <= -5.0%							

11 Table 2 shows the estimated bill impact distribution that would arise from the use of the
 12 CARC + 10 per cent pricing principle. In F2012 and F2013, although the majority of residential
 13 customers would see lower bill increases than under BC Hydro's Proposed pricing principle,
 14 some customers would have bill impacts greater than the applicable revenue requirement rate
 15 increase.¹¹

¹¹ Modelling assumptions, including assumed future rate increases, are set out in Appendix B. Assumed future rate increases for F2012-F2015 are as set out in BC Hydro's response to JIESC IR 3.40.3 filed September 17, 2010, in the F11 RRA proceeding.

1
2

Table 2 Bill Impact of Alternative (CARC + 10 per cent) RIB Rate Pricing Principle

Bill Impact Range > <=	F2012	F2013	F2014	F2015	F2016	F2017	F2018
> 25.0% <= 27.5%							
> 22.5% <= 25.0%	1.4%						
> 20.0% <= 22.5%	7.0%						
> 17.5% <= 20.0%	10.6%						
> 15.61% <= 17.5%	8.8%			8.9%			
> 9.73% <= 15.61%	28.3%	8.8%	71.7%	55.7%	9.0%		
> 8.58% <= 9.73%	10.1%	4.7%	22.7%	7.3%	34.5%	40.9%	37.6%
> 6.00% <= 8.58%	33.7%	11.0%	5.6%	16.8%	28.3%	31.0%	34.2%
> 5.17% <= 6.00%		3.5%		5.1%	9.5%	9.8%	10.1%
> 2.5% <= 5.17%		11.2%		6.1%	18.6%	18.3%	18.0%
> 0.0% <= 2.5%		9.9%			0.1%	0.1%	
> -2.5% <= 0.0%		13.3%					
> -5.0% <= -2.5%		37.5%					
> -10.0% <= -5.0%		0.2%					

3 Under the alternative CARC + 10 per cent pricing principle, the Step-2 rate reaches LRMC in
 4 F2014, and after that it is uncertain how BC Hydro would apply general rate increases to the
 5 RIB rate. If the Step-2 rate was capped at LRMC, as was assumed for modelling purposes, the
 6 result would be annual increases in the Step-1 energy rate greater than revenue requirement
 7 rate increases, with bill impacts greater than revenue requirement increases, particularly for
 8 the majority of customers who primarily see the Step-1 energy rate. This is also shown in
 9 Table 2 above.

10 **2.2 Conservation Impact**

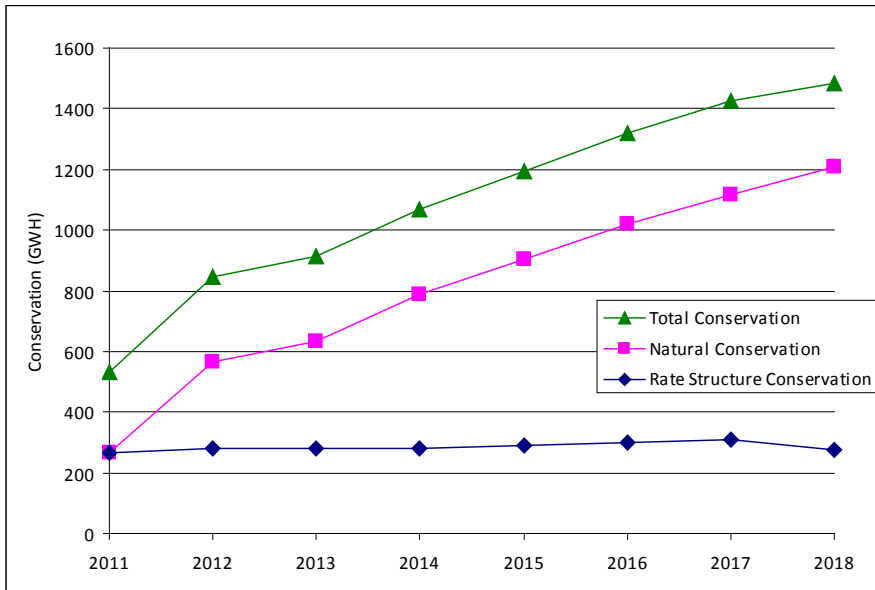
11 Under the Proposed pricing principle, the current differential between the RIB rate’s Step-1 and
 12 Step-2 prices is maintained, which in turn maintains the existing rate of conservation delivered
 13 by the RIB rate’s pricing. Under any alternative pricing principle that results in a relatively quick
 14 phase-in of the Step-2 rate to LRMC, the maximum run-rate conservation attributable to the
 15 rate structure is achieved relatively quickly.¹² However, it is also true that maximum run-rate
 16 conservation – that is, the sum of conservation attributable to the rate structure and
 17 conservation attributable to annual general rate increases – is the same, once Step-2 reaches
 18 LRMC, regardless of which pricing principle is adopted. This is shown in Figures 3 and 4
 19 below.¹³

¹² “Run-rate” conservation refers to annual energy savings, as distinct from cumulative conservation; the latter is the sum of run-rate conservation over a period of years.

¹³ That is “Total Conservation” in F2018 equals 1,430 GWh in both Figure 3 and Figure 4.

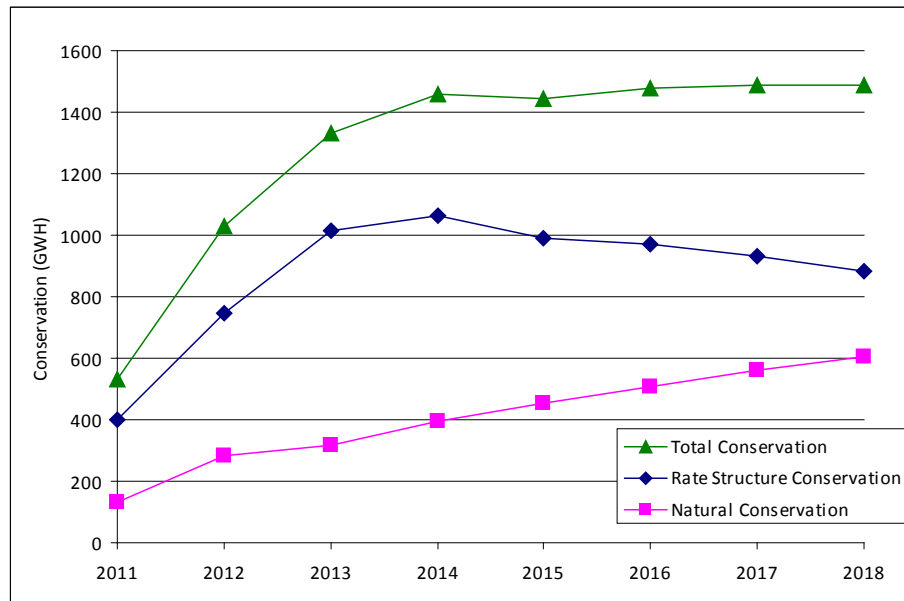
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Figure 3 RIB Rate Conservation under Proposed Pricing Principle



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Figure 4 RIB Rate Conservation under Alternative Pricing Principle (CARC + 10 per cent)



5 The foregoing observations are true insofar as BC Hydro's LRMC of new supply stays at an
6 inflation-adjusted level of 12.73 cents/kWh. BC Hydro believes its LRMC assumption to be

1 reasonable at least until BC Hydro's 2011 IRP is approved by government pursuant to the
2 *Clean Energy Act*.

3 **2.3 Forecast Future RRA Increases**

4 Aside from incremental bill impacts and conservation, the dominant driver behind BC Hydro's
5 RIB rate re-pricing proposal is the anticipated level of revenue requirement increases over the
6 next few years. The cumulative bill impact from anticipated revenue requirement proceedings
7 over the four-year period F2012 to F2015 covered in BC Hydro's response to JIESC IR 3.40.3
8 in the F11 RRA is 43 per cent, and more recent information in the F11 RRA NSA¹⁴ shows a
9 45 per cent cumulative increase over the same period.¹⁵ Both numbers are estimates of
10 budgets that have not been set, trade and water conditions that have not yet materialized, and
11 applications that have not been filed. Nevertheless, they present a challenging environment for
12 BC Hydro and its customers in which to pursue rate design initiatives that have incremental bill
13 impact consequences. In the context of RIB rate re-pricing, BC Hydro believes that it cannot
14 justify a RIB rate pricing principle, at this time, that would rapidly increase the Step-2 energy
15 rate to the level of its current LRMC, thereby causing incremental bill impacts for customers
16 but not yielding material incremental total conservation.

17 The foregoing discussion compares BC Hydro's Proposed pricing principle with an alternative
18 CARC + 10 per cent pricing principle. These alternatives can be seen as "bookends", with the
19 latter having the quickest plausible phase-in of the Step-2 rate to LRMC and the most extreme
20 incremental bill impacts as a result of the rate structure, while the former has the slowest
21 plausible phase-in of the Step-2 rate to LRMC along with the smallest degree of incremental
22 bill impacts. BC Hydro did consider, and model, other pricing alternatives between these
23 "bookends". In these alternatives the Step-2 rate was increased to LRMC more quickly than in
24 BC Hydro's proposal with more bill impacts than in BC Hydro's proposal, but slower and with
25 fewer bill impacts than what the CARC + 10 per cent pricing principle would yield. In
26 BC Hydro's view, the logic that supports the Proposed RIB rate pricing principle over the
27 CARC + 10 per cent pricing principle is equally applicable to any of the alternatives between
28 the bookends.

¹⁴ F11 RRA negotiated settlement agreement, approved by BCUC Order No. G-180-10, December 2, 2010, section 9(xv).

¹⁵ Assumed future RRA increases in this application do not reflect the B.C. government's recently announced rate mitigation measures.

1 **2.4 Revenue Neutrality**

2 Under the Proposed pricing principle, the RIB rate would meet the test of revenue neutrality as
3 originally developed in the RIB rate application.

4 **3 Regulatory Review and Reporting**

5 **3.1 Review Timetable**

6 BC Hydro does not expect this application will be controversial, and proposes that it be
7 resolved with a written hearing process as follows:

Intervener Registration Deadline	January 6, 2011
BCUC and Intervener Information Requests	January 17, 2011
BC Hydro Responses	February 7, 2011
Intervener Submissions	February 18, 2011
BC Hydro Submission	February 25, 2011

8 **3.2 Annual Compliance Filing**

9 Where revenue requirement rate increases are differentially applied to pricing elements of a
10 rate structure, it is common for utilities to make compliance filings, demonstrating the correct
11 application of the pricing principle to the subject rate structure. This process has been followed
12 by BC Hydro in regard to the RIB rate since its inception in 2008. Such a process is
13 unnecessary where revenue requirement rate increases are applied equally to each element of
14 a rate structure, as BC Hydro proposes in regard to the RIB rate in this application.
15 Accordingly, BC Hydro does not expect to make the annual RIB rate compliance filings it has
16 made since the commencement of the RIB rate, pending new pricing principles in the future.
17 However, BC Hydro would continue to file updated tariff sheets as required.

18 **3.3 RIB Rate Report**

19 As noted, BC Hydro is developing a TOU rate, which is expected to be applicable at least on a
20 voluntary basis to residential customers following the implementation of its Smart Metering and
21 Infrastructure Program. Currently BC Hydro expects to file its TOU application in late 2011,
22 with a BCUC decision in regard to it no earlier than mid-2012. Depending on the scope of the

1 application, and in particular whether the residential TOU rates would be mandatory default
2 rates, BC Hydro anticipates that significant residential rate issues could arise in that associated
3 proceeding.

4 More or less at the same time as the BCUC will be considering BC Hydro's TOU rate
5 application, the B.C. government will be considering BC Hydro's 2011 IRP. At this time
6 BC Hydro believes that government will issue a response to the 2011 IRP in or about the
7 middle of 2012; however, there is no legally mandated timeline for such a response.

8 In BC Hydro's view, the BCUC decision regarding BC Hydro's TOU rate application and the
9 government response to the 2011 IRP will both provide important insight to the direction
10 BC Hydro should take with residential rates. Accordingly, BC Hydro proposes that within
11 twelve months of the later of the BCUC's TOU decision and the government's response to the
12 2011 IRP that BC Hydro file a report with the BCUC regarding its RIB rate. That report would
13 do one of three things:

- 14 1. if no further change is warranted to the RIB rate structure at that time, the report would
15 say so, but propose a further, future reporting deadline; or
- 16 2. if change is warranted to the RIB rate structure, and BC Hydro believes the timing is
17 appropriate, the report would be accompanied by or be part of a new RIB rate
18 application; or
- 19 3. if change is warranted to the RIB rate structure, but the timing is not appropriate,
20 BC Hydro would provide a commitment in the report to filing a new RIB rate application
21 by a fixed date.

22 Given the anticipated timing of a BCUC decision on the TOU application and the government's
23 response to the IRP, and the twelve months that BC Hydro would require before it could move
24 forward on the RIB rate after those events, BC Hydro expects that the RIB rate report
25 described above would be filed with the BCUC in 2013, or in approximately two to three years
26 from now.

1 **3.4 Contact Information**

2 All communications regarding this application should be directed to:

<p>Joanna Sofield Chief Regulatory Officer British Columbia Hydro and Power Authority 1600-333 Dunsmuir Street Vancouver, BC V6B 5R3</p> <p>Telephone: 604-623-4046 E-mail: bchydroregulatorygroup@bchydro.com</p>	<p>Jeff Christian Lawson Lundell LLP 1600-925 West Georgia Street Vancouver, BC V6C 3L2</p> <p>Telephone: 604-631-9115 E-mail: jchristian@lawsonlundell.com</p>
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**Residential Inclining Block Rate
Re-pricing Application**



Appendix

A

Draft Order

BRITISH COLUMBIA
UTILITIES COMMISSION

ORDER
NUMBER G-



SIXTH FLOOR, 900 HOWE STREET, BOX 250
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IN THE MATTER OF
the Utilities Commission Act, R.S.B.C. 1996, Chapter 473

and

An Application by British Columbia Hydro and Power Authority (BC Hydro)
To Implement a Residential Inclining Block Rate Pricing Principle

BEFORE: _____, Commissioner _____, 2011

O R D E R

WHEREAS:

- A. On August 28, 2008, the Commission, by Order No. G-124-08, approved BC Hydro's application to implement a residential inclining block (RIB) rate for its residential customers, with approval of pricing principles for BC Hydro's Fiscal 2009 and Fiscal 2010 periods; and
- B. By Order No. G-47-10, dated March 15, 2010, and Order No. G-180-10, dated December 2, 2010 the Commission approved, on an interim and final basis, respectively, a pricing principle for the RIB for BC Hydro's Fiscal 2011 period; and
- C. BC Hydro filed on December 21, 2010, pursuant to sections 58 to 61 of the *Utilities Commission Act*, an application for approval of RIB rate pricing principles for Fiscal 2012 and onward, under which BC Hydro would increase the three components of the RIB rate (Step-1 energy rate, Step-2 energy rate and Basic Charge) by the amount of any approved general rate increase; and
- D. The Commission has reviewed BC Hydro's proposed RIB rate pricing principle and agrees that BC Hydro's proposal is appropriate and in the public interest.

BRITISH COLUMBIA
UTILITIES COMMISSION

ORDER
NUMBER G-

2

NOW THEREFORE the Commission orders as follows:

1. BC Hydro shall implement its proposed RIB rate pricing principle each year, commencing in F2012, by increasing each of the three components of the RIB rate (Step-1 energy rate, Step-2 energy rate and Basic Charge) by the amount of any approved general rate increases;
2. BC Hydro shall file updated tariff sheets reflecting rates calculated in accordance with the approved RIB rate pricing principle as required;
3. Within 12 months of the later of (i) a Lieutenant Governor in Council order under subsection 4(1) of the *Clean Energy Act*, S.B.C. c. 22, (CEA) in response to a BC Hydro integrated resource plan submitted pursuant to subsections 3(1), 3(2) and 3(6)(a) of the CEA; (ii) the Commission's final order regarding BC Hydro's anticipated time-of-use rate application for residential customers; or (iii) December 31, 2012, BC Hydro shall file a public report with the Commission regarding the RIB rate (the RIB Rate Report). The RIB Rate Report shall provide BC Hydro's views on the continuing applicability of the RIB pricing principles approved in this order. The RIB Rate Report may be in the form of an application, seeking new pricing principles for the RIB Rate; it may provide a commitment by BC Hydro to bring such an application at a future date; or it may propose a future reporting date if in BC Hydro's view no change in the RIB rate pricing principles approved by this order is warranted.

DATED at the City of Vancouver, in the Province of British Columbia, this day of , 2011.

BY ORDER

**Residential Inclining Block Rate
Re-pricing Application**



Appendix

B

Modelling Assumptions

1 Load Forecast

Table B-1 shows the assumed residential load used for modelling purposes. The residential load forecast for F2011 - F2015 was prepared in August 2010 and corresponds to rate increases in Table B-2 which correspond with BC Hydro's response to JIESC IR 3.40.3 in the F11 RRA proceeding. The F2016 - F2018 forecast is based on an updated October 2010 load forecast.

Table B-1 Residential Load Forecast

Fiscal Year	Residential Load Forecast after DSM (GWh)
2010	17,305
2011	17,856
2012	17,905
2013	17,743
2014	17,424
2015	17,618
2016	18,055
2017	18,171
2018	18,274

2 F2011 Residential Rates

- Step-1 rate = 6.27 cents/kWh
- Step-2 rate = 8.78 cents/kWh
- Basic Charge = 13.41 cents/day
- Deferral Account Rate Rider = 4 per cent

3 Class Average Rate Changes

Table B-2 shows the assumed class average rate changes (**CARC**) used for modelling purposes. Note that the numbers below are estimates based on budgets that have not been set, trade and water conditions that have not yet materialized, applications that have not been filed, and do not account for recently announced government rate mitigation measures.

Table B-2 Assumed Class Average Rate Changes

Fiscal Year	Revenue Requirement Rate Increase (%)¹	Change in Rate Rider & Rate Rider (%)	Class Average Rate Change (%)²
2012	15.61	+1.0 & 5.0	16.8
2013	5.17	0 & 5.0	5.2
2014	9.73	-0.5 & 4.5	9.2
2015	8.58	-2.0 & 2.5	6.4
2016	6.00	-2.0 & 0.5	3.7
2017	6.00	-0.5 & 0	5.3
2018	6.00	0 & 0	5.9

¹ F2012 - F2015 assumptions are taken from the response to JIESC IR 3.40.3 in the F11 RRA proceeding (filed with BCUC on September 17, 2010); the numbers for F2016-F2018 are indicative only, and are based on the long term forecast presented during the 2008 Long Term Acquisition Plan regulatory proceeding.

² It is assumed that there is no rate rebalancing during the modelled test years.

4 Long Run Marginal Cost

Table B-3 shows the calculation of BC Hydro’s long run marginal cost (**LRMC**) of new supply from the 2009 CPC results, escalated by inflation and line losses.

Table B-3 Long Run Marginal Cost Calculations

Fiscal Year	Inflation (%)	Plant Gate Price from 2009 CPC (cents/kWh)	Line Losses (Transmission & Distribution) (%)	Nominal LRMC (cents/kWh)
2009	N/A	11.13	N/A	N/A
2010	1.8	11.33	N/A	N/A
2011	1.7	11.52	6 & 6	12.95
2012	2.0	11.75	6 & 6	13.21
2013	2.0	11.99	6 & 6	13.47
2014	2.1	12.24	6 & 6	13.75
2015	2.1	12.50	6 & 6	14.04
2016	2.1	12.76	6 & 6	14.34
2017	2.1	13.03	6 & 6	14.64
2018	2.1	13.30	6 & 6	14.95



RIB Step-2 energy rates used for modelling BC Hydro’s Proposed and the alternate “CARC + 10%” pricing principles are shown in Table B-4 below. Note that the Step-2 energy rates are capped for modelling purposes at the nominal LRMC prices shown in Table B-3 above.

Table B-4 Step-2 Energy Rate under BC Hydro’s Proposed and Alternate CARC + 10 per cent Pricing Principles

Fiscal Year	Step-2 Rate (BC Hydro Proposal, Nominal cents/kWh)	Step-2 Rate (Alternate CARC + 10%, Nominal cents/kWh)
2011	8.78	8.78
2012	10.15	11.05
2013	10.67	12.78
2014	11.71	13.75
2015	12.71	14.04
2016	13.48	14.34
2017	14.28	14.64
2018	14.94	14.94

Note: Under BC Hydro’s proposal each pricing element of the RIB rate, including the Step-2 energy rate, would increase annually by the RRA rate increase. Under the alternate “CARC + 10%” pricing principle, the Step-2 rate increases annually to the point that the maximum bill impact is CARC + 10 per cent. In both cases, the nominal Step-2 energy rate in any year does not exceed nominal LRMC.

5 Other Modelling Assumptions

Table B-5 Other Modelling Assumptions

Own-price elasticity for residential customers whose marginal consumption is at the Step-2 rate	-0.1
Own-price elasticity for residential customers whose marginal consumption is at the Step-1 rate	-0.05
For purposes of allocating conservation between natural and structural, the own-price elasticity when there is a change to the rate structure (alternate "CARC + 10%" pricing principle)	-0.05
For purposes of allocating conservation between natural and structural, the own-price elasticity when there is no change to the rate structure (BC Hydro's Proposed pricing principle)	-0.1
Effective Date of New Rate	April 1, 2011 (F2012)

6 Rate Rider

Figure 1, Figure 2 and Table B-4 show modelled tariff prices, exclusive of the Deferral Account Rate Rider. For modelling purposes, tariff prices are increased by the assumed rate rider for the applicable year, shown in Table B-2.

7 Billing Determinants

Billing determinants used for modelling bill impacts and conservation are the actual residential account usage from April 2009 to March 2010. The data is calendarized, weather normalized, and excludes accounts without a full 12 months of data.