



FOR GENERATIONS

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Victoria, BC V8T 4J1

Dear Mr. Barillaro:

RE: Industrial Electricity Policy Review

BC Hydro writes to enclose its response to the Industrial Electricity Policy Review Task Force Issue Papers.

Yours sincerely,

A handwritten signature in black ink that reads "Janet Fraser".

Janet Fraser
Chief Regulatory Officer

mb/rh

Enclosure

Industrial Electricity Policy Review



**BC Hydro Comments in response to the
Industrial Electricity Policy Review Task Force
Issue Papers**

March 28, 2013

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1 Introduction

2 BC Hydro writes to present its comments on the Issue Papers released by the
3 Industrial Electricity Task Force. BC Hydro has structured these comments in two
4 parts.

5 Part I provides over-arching comments and context, dealing with the Task Force's
6 Terms of Reference, the B.C. regulatory framework, the Heritage Contract Enquiry,
7 and BC Hydro's load-resource balance. A summary of BC Hydro's preliminary
8 recommendations to the Task Force are also contained in this section.

9 Part II provides specific comments on matters directly raised by the Issue Papers.

Part I**Terms of Reference**

BC Hydro's comments on the Issue Papers issued by the Task Force are informed by the Task Force's mandate under its Terms of Reference (**ToR**). That mandate can be summarized as responding to the following questions:

1. What changes to transmission voltage rates, or the regulatory framework within which those rates are established, could be made to advance the public policy objectives of electricity conservation, economic development, and current environmental policy?
2. To the extent one policy objective is pre-eminent, what are the implications on the other objectives?
3. What principles ought to guide the Province in exercising its legislative powers to direct or preclude rate-making decisions by the British Columbia Utilities Commission (**BCUC**)?

BC Hydro considers that each of the individual issues set out in items 1 to 7 of the ToR, and which roughly correspond to the subject matter of the Issue Papers, are meant to be considered from three public policy perspectives: conservation, economic development and current environmental policy. Accordingly, BC Hydro's comments on the Issue Papers are provided from the perspective of the extent to which the objectives can be advanced through industrial electricity rates and the necessary trade-offs between them.

There are no definitions of economic development, conservation, or environmental policy in the ToR and that raises some challenges, particularly with regard to the environmental policy objectives. In the case of the latter, BC Hydro considers that the environmental objective referred to is the Greenhouse Gas (**GHG**) reduction policies as manifest in, among other things, subsection 2(g) of the B.C. *Clean Energy Act* (**CEA**) which references the legislated GHG reduction targets in the *Greenhouse Gas Reduction Targets Act*, and Provincial Government policy documents such as the Climate Action Plan.¹

Because the ToR expressly acknowledges that the pursuit of any of the three policy objectives can require trade-offs with regard to the other two, BC Hydro understands that what the Province is seeking from the Task Force is a menu of alternatives that will inform the Province depending on which of the three objectives it might decide is paramount. That is, BC Hydro understands that the Task Force is not being asked to

¹ www.gov.bc.ca/premier/attachments/climate_action_plan.pdf.

1 recommend one particular policy objective over another, or to make assumptions
2 about which objective is paramount.

3 **Regulatory Framework**

4 Since the Task Force will be required to report on potential changes to the regulatory
5 framework within which transmission-voltage rates are established, it is useful to
6 summarize the essential elements of the current regulatory framework.

7 BC Hydro's rates are established by the BCUC under the authority of the *Utilities*
8 *Commission Act (UCA)*. Under the UCA, "rates" includes both pricing (e.g.
9 cents/kWh) and so-called "non-rate terms and conditions". In consequence, the
10 BCUC has the authority to establish the entirety of the utility-customer relationship
11 through the orders it issues in response to rate applications by utilities, on complaint
12 by customers, or on its own motion. It may exercise this authority only after a
13 hearing, which usually but not always is a public hearing.

14 Although rates in this broad sense of the word are often put into contractual form,
15 the relationship between a customer and a utility is not contractual, but has the
16 character of an enactment, at least to the extent it is established through a BCUC
17 rate proceeding.

18 While the BCUC has broad discretion in the establishment of rates, that discretion is
19 subject to certain restrictions. As a matter of law, it must establish rates that are fair,
20 just and not unduly discriminatory, and at a level that allows a utility a reasonable
21 opportunity to recover the costs it has prudently incurred for the provision of utility
22 service (in a revenue requirements proceeding). Also as a matter of law, it may in
23 the course of establishing rates only take into account factors that relate to the
24 characteristics of the utility service provided, notably the cost of service. Despite its
25 broad discretion, the BCUC is not generally free to set rates to advance whichever
26 Provincial public policy objective it perceives to be particularly important. Finally, the
27 BCUC has, like virtually all other similar rate-setting tribunals, determined that within
28 its legal parameters it ought to establish rates that address and balance factors such
29 as efficiency (in the economic sense of the word), rate stability, customer
30 understanding, and so on. These factors are commonly referred to as the Bonbright
31 principles.²

32 It is important to note that none of the policy objectives identified in the ToR are ones
33 that the BCUC may lawfully advance in the absence of a lawfully binding provincial
34 direction or the absence of some other lawful rate design purpose or factor. For
35 example, in the context of commercial and residential customers, where there is no
36 binding legislative direction to the BCUC to establish rates to advance electricity

² The eight Bonbright principles are: fair apportionment of costs; price signals that encourage efficient use; rate stability; customer understanding and acceptance; recovery of revenue requirement; practical and cost effective; provision of revenue stability; no undue discrimination.

1 conservation, conservation rates have nevertheless been justified at the BCUC on
2 the basis of normal rate-making criteria. In particular, the argument successfully
3 advanced by BC Hydro was that marginal-cost based pricing is economically
4 efficient, and efficient pricing is a usual and perfectly acceptable rate-making
5 objective. In addition, where marginal costs exceed embedded costs marginal-cost
6 pricing will result in conservation to the extent that electricity consumption is subject
7 to some price elasticity.

8 Recent changes to the UCA, and the enactment of the CEA, have caused the BCUC
9 to have to consider the “British Columbia energy objectives” when considering
10 certain types of issues before it. For example, the BCUC must consider those
11 objectives in considering an application for approval of extensions to a utility’s plant
12 (through a certificate of public convenience and necessity proceeding). It is
13 important for the Task Force to appreciate that under the current regulatory
14 framework the BCUC has no obligation and is not specifically empowered to set
15 rates in a manner that would advance any of the “British Columbia energy
16 objectives”. As with conservation rates in the residential and commercial contexts, it
17 can do so only to the extent that rates can otherwise be rationalized on the basis of
18 the usual rate-making criteria.

19 In the establishment of rates for transmission voltage service, the BCUC is
20 constrained by section 3 of Heritage Special Direction No. HC2 (**HSD#2**). In general
21 that enactment requires the BCUC to establish a stepped rate for transmission
22 voltage customers within certain parameters, and also precludes the BCUC from
23 altering Tariff Supplements 5 (**TS 5**) and 6 (**TS 6**). The former is the Electricity
24 Supply Agreement that governs the specific terms and conditions of supply to
25 transmission voltage customers; the latter is the contribution policy in regard to
26 new/incremental customer loads and is directly implicated in this Task Force review.
27 As indicated by its name, HSD#2 arose from the 2003 Heritage Contract Enquiry.

28 **Heritage Contract Enquiry**

29 The Heritage Contract Enquiry was a watershed proceeding that resolved a public
30 policy issue that had been the subject of much debate through the 1990s and into
31 the first years of the last decade, namely who ought to benefit, and to what degree,
32 from the economic value associated with the low embedded cost Heritage Assets. In
33 summary, the Heritage Contract Enquiry resolved that customers should get the
34 entirety of the economic benefit of the Heritage Assets, subject to a floor of zero and
35 a cap of \$200 million in regard to the trade benefits of those assets (the cap has
36 since been eliminated); and that all customers, new and old, should be able to derive
37 some benefit from the Heritage Assets, with the degree to which they should benefit
38 being a matter of BCUC rate design subject, implicitly, to the allocation of benefits
39 reflected in TS 6. The fact that the terms of TS 6 are so fundamental to the allocation
40 of Heritage Asset benefits explains why HSD#2 prohibits its amendment by the

1 BCUC, just as the BCUC is not free to amend other aspects of the Heritage
2 Contract.

3 The compelling arguments that determined this result of the Heritage Contract
4 Enquiry were, first, by providing all the benefits of the Heritage Assets to customers,
5 rather than allocating them between the Province and customers, BC Hydro would
6 have no incentives to operate the system sub-optimally for the benefit of one or the
7 other beneficiary. That is, the allocation of all the Heritage Asset benefits to one
8 party, customers, maximized the total benefits of the BC Hydro system. The second
9 compelling argument was that any other type of allocation would have resulted in
10 higher costs for customers to the extent that BC Hydro had to take incremental price
11 and volume risk with regard to the supply of any fixed amount of energy and
12 capacity from the Heritage Assets.

13 While the scope of the Task Force's mandate is obviously broad, BC Hydro does not
14 see it as being broad enough to revisit the fundamental tenets of the Heritage
15 Contract framework. In the context of TS 6, that fundamental tenet is that some
16 threshold (not necessarily 150 MV.A) ought to be maintained and above which large
17 loads do not necessarily get the same degree of access to the benefits of the
18 Heritage Assets that smaller loads below the threshold would get.

19 **Load-Resource Balance**

20 It is apparent that many issues regarding rates and rate design turn on assumptions
21 regarding a utility's load-resource balance, both in the immediate future and over the
22 longer term. While it is clear that BC Hydro will have surplus energy for at least a few
23 years, the information currently available regarding load-resource balance is not
24 complete given that BC Hydro has not completed its current Integrated Resource
25 Plan (**IRP**) which is to be submitted to the Provincial Government in August 2013.
26 The lack of a full evidentiary-type IRP puts significant limitations on what the Task
27 Force and the consultative parties are able to do in this proceeding.

28 In particular, BC Hydro believes that the Task Force should only make
29 recommendations to government that emphasise the relationships between
30 conservation, economic development, and current environmental policy in respect of
31 the issues it is exploring. Those recommendations should emphasise how
32 government might wish to think about the subject relationships under various
33 load-resource balances.

34 Government, in turn, can then set or amend policy and/or legislation, and/or it can
35 issue directions to the BCUC, in light of both the IRP and the Task Force's
36 recommendations it has received.

37 From there, the BCUC may undertake its work to set rates, pursuant to the UCA and
38 any other legislative provisions that government may prescribe.

1 Recommendations

- 2 • In considering the three public policy objectives, and in light of the lack of
3 definition of them, the Task Force should be careful to identify any assumptions
4 it makes regarding their particulars and scope.
- 5 • The Task Force should resist recommendations that contemplate specific rate
6 outcomes. This is neither the Task Force’s mandate, nor is it practical in light of
7 the critical information still to arise from the IRP.
- 8 • TS 6 establishes a distinction in cost allocation approaches between “small”
9 and “large” customers. The implications of large customers’ interconnections
10 will always be profound, and those implications will generally involve social,
11 economic, and environmental impacts that reach beyond the BCUC’s
12 jurisdiction. Moreover, the social, economic, and environmental implications will
13 frequently be case specific – a function of both the specific industry under
14 consideration, and any particular customer’s effect on the BC Hydro system
15 (including, fundamentally, its effect on the load-resource balance prevailing at
16 the time and anticipated in the near and more distant future). As such, it
17 remains appropriate for large customers to (i) receive distinct tariff treatment;
18 and (ii) sometimes attract a bespoke government response, enacted by policy
19 and direction. The Task Force should make recommendations that preserve
20 this fundamental construct but allow for a transparent process to fine-tune
21 specific tariff language. That is, any recommendations to the Province with
22 regard to TS 6 should include a recommendation that a threshold be
23 maintained above which large loads would not necessarily benefit from the
24 Heritage Assets to the extent that smaller loads would, while allowing for other
25 changes to TS 6 including, potentially, changing the specific 150 MV.A
26 threshold to some other threshold. Similarly, the Task Force should recommend
27 that for loads below the defined threshold, the loads should benefit from the
28 Heritage Assets, albeit potentially with a refined contribution policy.
- 29 • Retail access policies, and associated policies related to bypass (of the utility),
30 should be informed by clear principles, of which perhaps the most fundamental
31 is to not harm non-participating ratepayers. The specific rate provisions which
32 best give effect to these principles will vary over time, and will be affected
33 fundamentally by the load-resource balance of the system, and the specific
34 circumstances of recent infrastructure additions. The Task Force should
35 recommend appropriate principles to government. Such principles should be
36 available to guide the BCUC in setting the terms and conditions of retail access
37 and bypass-related rates.
- 38 • The Task Force should recognize the fundamental relationship between the
39 various elements of the Transmission Stepped Rate (TSR) design, and the
40 improvements that have been made in the operation of the rate through recent

1 BCUC-approved criteria for establishing customer baseline loads (**CBLs**). The
2 Task Force may wish to comment on the policy implications of the rate and
3 suggest changes to the policies that underpin it, but should resist any desire to
4 reset elements of the rate itself. The Task Force should recommend that
5 government reserve specific rate setting matters concerning RS 1823 for the
6 BCUC.

- 7 • The Task Force should recommend that government preserve its current policy
8 in favour of postage stamp electricity rates for BC Hydro, and that the BCUC
9 maintain its view that the burden to justify any departure from postage stamp
10 rates lies with those that might advance such a case.
- 11 • The Task Force should clearly identify for government how such factors as the
12 load-resource balance, customer price responsiveness, industrial market
13 conditions, and general economic conditions affect the impact of any given rate
14 on conservation, economic development, and environmental impacts. It should
15 encourage government to recognize that these “macro” issues should inform
16 legislation, policy and instructions to the BCUC. The BCUC should then remain
17 empowered to set rates that reflect both those policies and the very important
18 demands of the Bonbright principles.

19 Each of these recommendations is reflected in the specific comments BC Hydro
20 provides on the Issue Papers in Part II.

Part II**Transmission and Generation Contribution Policy**

The Task Force Issue Papers entitled Transmission Contribution Policy and Generation Contribution Policy address several closely related issues raised by BC Hydro's TS 6:

1. The allocation of incremental transmission and generation costs to new industrial customers;
2. The specific methodology used to determine the customer's contribution to the incremental costs; and
3. The mechanism for the customer to make its contribution and in particular the role of security.

BC Hydro's comments focus largely on the highest-order policy issue of the three, namely the allocation of incremental costs to new industrial customers (item (1)). The other two issues cover a number of lower-order rate design issues that BC Hydro believes ultimately ought to be resolved by the BCUC through a rate design proceeding that benefits from a full evidentiary record. That is, it is BC Hydro's position that the Task Force recommend that a basic component of the Heritage Contract – that new very large loads on the system pay full incremental costs, while smaller loads would not – remain unchanged. However, it would be appropriate for the Task Force to make recommendations to government that would allow for changes to the specific manner in which contributions are calculated (item 2) and assessed (item 3). It has become apparent that issues in items 2 and 3 have caused concern for BC Hydro customers for some time.

TS 6 is the Facilities Agreement for new and existing customers taking service from BC Hydro at transmission voltage. It was approved by the BCUC in 1991.

TS 6 was designed around what is called a "revenue-test model". The general operation of revenue-test tariffs (and TS 6 follows this approach) is that new customers pay for the assets that they cause to be built, net of a utility contribution to account for the incremental revenues generated by the new customer.

At the time it was introduced, TS 6 was designed to leave existing customers relatively indifferent to the introduction of new load (i.e., neither better nor worse off for the arrival of the new load). The BCUC recognized this effect in 1991 when it referenced the lack of inter-class financial impacts as the primary reason for accepting the negotiated tariff. At the time BC Hydro had a significant energy surplus, although it was clear that the surplus was coming to an end.

1 Both TS 6 and TS 5 were effectively frozen by the Province as part of the Heritage
2 Contract framework largely established by HSD#2.

3 Contribution policies for other classes of customers remain a matter for BCUC rate
4 design, consistent with most other jurisdictions in which utilities are regulated.

5 It is BC Hydro's view that the general principles underlying TS 6 remain relevant;
6 specifically, that large new industrial customers should contribute to the cost of bulk
7 system reinforcements, including new generation, required to serve them. This
8 reflects the very large impact that these customers can have in either directly
9 triggering new investment, or in advancing in time such investment. Critically, this
10 allocation forms an essential component of the general allocation of Heritage Asset
11 benefits that emerged from the Heritage Contract Enquiry. As noted above,
12 eliminating this allocation should not form part of this Task Force's scope of
13 consideration.

14 TS 6 addresses the different impacts of large and small load increases by
15 distinguishing between new or incremental loads that are in excess of 150 MV.A,
16 and new or incremental loads that are at or below that threshold. Specifically, the
17 definition of System Reinforcements, for which new or expanding customers are
18 financially responsible, does not include generation costs or 500 kV-and-above
19 transmission costs, for customers with loads of 150 MV.A. or less.

20 The 150 MV.A threshold results in customer loads at or below 150 MV.A receiving a
21 share of the Heritage Asset benefits, while loads above 150 MV.A generally do not.

22 A drawback of the significant financial impact of exceeding the threshold is that it
23 can encourage gaming, both in terms of the requested contract demand and in
24 terms of the phasing of projects. Currently, BC Hydro has no choice but to take
25 customers at their word when they define their current and forecast needs, and
26 BC Hydro believes that most customers are providing this information in good faith in
27 light of business and investment uncertainty. Nevertheless, BC Hydro would
28 welcome the Task Force considering means by which the BCUC may interpret (or
29 seek government consent to modify) TS 6 to assist with ensuring outcomes that are
30 fair, transparent, and consistent with the allocative intents.

31 Consideration of TS 6 (and the more general question of an appropriate contribution
32 policy) in the context of the three public policy objectives identified in the Terms of
33 Reference suggest the following comments on the objectives.

34 **Comments on Objectives**

35 ***Economic Development Objective***

36 B.C. is a low cost jurisdiction for electricity. That is, B.C.'s embedded cost of energy
37 is below the prevailing marginal cost of any generation addition. In this environment,

1 imposing the full cost of new generation on any new load will create higher costs for
2 new loads than would a policy of “rolling in” a new customer’s costs (and, by
3 extension, charging that new customer the average embedded cost of service).

4 Similarly, in these conditions, rolling-in costs attributed to new loads will cause the
5 electricity costs of existing customers to rise, imposing a greater burden on existing
6 industry.

7 It is impossible to know in the abstract how trading off these outcomes – cheaper
8 electricity for new customers or cheaper electricity for existing customers – affects
9 the creation of economic value for the province. That is a fact-specific function of the
10 economic, market, and competitive positions of the specific new and existing
11 customers, and of any tax or other policies that might apply to them.

12 Most generally, while it is conceptually true that lower electricity prices for new
13 customers will attract new industry and higher prices for existing customers will push
14 some current firms away, the reality is more nuanced. There are, in fact, many other
15 factors besides electricity prices that affect whether an industrial customer decides
16 to relocate. Moreover, before electricity prices adjust enough to actually affect
17 location decisions, smaller electricity price changes will simply act to transfer value
18 among ratepayers, government, and corporations. Achieving this transfer of value –
19 without triggering relocation decisions – may be a legitimate policy intent.

20 The Heritage Contract has already defined the general case – if a customer has a
21 small new load, it is entitled to a share of Heritage Assets no matter what; if it has a
22 large new load it generally is not. Defining this general case is the best a tariff like
23 TS 6 can do, and in BC Hydro’s view the Task Force does not have the mandate to
24 revisit this general case.

25 Through regulations issued under the UCA, the government can make specific
26 determinations for specific cases. For example, it could impose more incremental
27 pricing rules on high-margin industries and more rolled-in pricing in lower margin
28 industries. Or it could apply other social criteria, such as distinguishing contribution
29 policies based on an industry’s tax, employment, or environmental impacts. When
30 government should advance cost allocations that are outside the general rule is a
31 matter for it to determine (with advice from this Task Force). As such, BC Hydro will
32 make no further comment on that in this submission.

33 ***Conservation Objective***

34 Conservation has been a fundamental objective of BC Hydro’s retail electricity rates
35 for a number of years. However, BC Hydro has not sought amendment to its system
36 extension rates (or contribution policies) on this basis.

37 In general terms, extension rates that charge incremental costs will tend to
38 discourage load growth, while fully rolled in extension rates will tend to encourage

1 load growth. As such, it may be broadly concluded that TS 6 is not particularly
2 supportive of conservation for small load increases, but will tend to discourage large
3 load increases. Again, this result is enshrined in the Heritage Contract, and should
4 not be revisited here. Importantly, however, the objective of conservation that is
5 relatively absent in TS 6 is reflected in BC Hydro's default electricity rate for
6 transmission voltage customers (RS 1823 Stepped Rate). Applying the
7 "conservation" lever (marginal price signal) in that stepped rate is preferable to
8 seeking conservation-driven amendments to TS 6.

9 ***Environmental Objective***

10 BC Hydro's TS 6 provides a relatively encouraging price signal for new load growth
11 in smaller increments, but not for large-increment load growth. To the extent
12 economic pressures dictate that any of this load growth be met by BC Hydro adding
13 new gas-fired generation, it increases the strain on government meeting its
14 environmental objectives (unless, of course, the TS 6 price signals are overwhelmed
15 by other pricing policies, such as GHG off-set requirements or a carbon tax, for
16 example).

17 It should also be noted that when any rate policy is being used to affect a social
18 policy objective (such as environmental protection) through raising prices, it runs the
19 risk of encouraging bypass. For example, if BC Hydro has a policy of charging new
20 or expanding customers for the full cost of a marginal generation portfolio that is
21 made up of relatively high-cost clean resources, it may find customers tempted to
22 self-supply with lower cost resources that are not clean, or to buy electricity
23 third-party generated resources that are not clean. This is a form of
24 within-jurisdiction bypass, and can occur, for example, when BC Hydro is subject to
25 an environmental burden that does not affect all companies operating in B.C. Such
26 is the case with B.C.'s current "93 per cent clean" section 2 CEA objective. Utilities
27 and policy makers also need to worry about companies that avoid a rate regime by
28 leaving the jurisdiction. This can happen if electricity rates are forced up by
29 environmental policies applied here but not applied in competitive jurisdictions.

30 These issues are critical when considering extension policies, retail rates, and (as
31 discussed below) retail access and bypass policies.

1 **Retail Access**

2 Retail access is not a new concept in British Columbia. It has been discussed and
3 implemented in various forms over the past 20 years.

4 Retail access, and the related idea of bypass, are complex policy questions because
5 they involve the transition of customers between a fully regulated world and a
6 market-priced world.

7 Retail access occurs when a customer buys some or all of its generation from a
8 third-party supplier, but continues to use the utility's wires for delivery. Utility bypass
9 is the case where a customer uses self-generation or nearby-supply options to avoid
10 both utility generation and wires.³

11 The extent to which a departing or bypassing customer creates costs to either the
12 utility or its customers is case specific. For example, if no new utility infrastructure
13 has been built for years but new investment is pending, departing customers may be
14 helpful to the utility and its remaining customers (if the departure delays or forgoes
15 investment). In contrast, if the system is overbuilt and in surplus, rates may be under
16 upward pressure and departures could be devastating for remaining customers and
17 the utility.

18 Similarly, if the departing customer is sized or located such that its departure has no
19 impact on pending capital investments, the departure is, again, harmful to remaining
20 customers, although in this case the argument about departing-customer cost
21 responsibility is far more challenging.

22 As currently designed, BC Hydro's Industrial Retail Access Program (**RAP**) is tied to
23 the Transmission Stepped Rate (RS 1823) and was designed to promote the IPP
24 industry in a time when BC Hydro was facing a significant shortfall of supply to meet
25 demand. The program was not successful in achieving this objective. As well, it
26 became apparent – although not the primary reason for BC Hydro's proposal to
27 suspend the RAP – that there was inadequate protection for remaining customers
28 that would face unreasonable costs when other customers depart the BC Hydro
29 system. This violated the fundamental tenet of retail access or bypass programs: the
30 no-harm principle.

³ It should be noted that so-called *bypass rates* are, in fact, rates provided by the utility to avoid bypass. As such, a customer on a bypass rate has been offered bespoke terms and conditions in order to retain that customer on utility service. This is generally offered where the customer's cost of bypassing the utility is lower than its costs would be under normal utility rates, but it is in the interest of all utility customers for the new customer to take utility service rather than avoid it.

1 No-Harm Principle

2 A no-harm principle should apply to any retail access or bypass policy. This principle
3 ensures that the utility and other customers (or customer classes) are not negatively
4 impacted when existing customers use retail access or bypass the utility for
5 self-generation.

6 The no-harm principle is not a new concept. It is a feature of West Kootenay Power's
7 and BC Hydro's Wholesale Access Principles, which have both been approved by
8 the BCUC. BC Hydro's Tariff Supplement 55, approved by BCUC Order
9 No. G-11-01, includes a "Hold Harmless" provision that states:

10 "For customers who remain with Utility supply, the exit, partial
11 exit or re-entry of Specified Access Customers must, at a
12 minimum, make them no worse off than if Specified Access
13 Customers had always remained with the Utility."

14 A variety of levers can be used to ensure there is no harm to non-participants:

- 15 • Exit fees can be charged when an existing customer purchases part of their
16 load from a third party or bypasses utility service. These fees can help
17 BC Hydro avoid stranded investments by recovering costs that have been
18 incurred by BC Hydro to serve the customer's full load. Such costs could
19 include recent capital improvements to the Generation, Transmission, or
20 Distribution systems or the cost of recent energy supply contracts signed on the
21 expectation the customer would continue purchasing all their supply from
22 BC Hydro.
- 23 • Re-entry fees can be charged to recover the cost of acquiring additional energy
24 sources or building additional infrastructure should the customer seek to return
25 to purchasing their full electricity supply from BC Hydro. Alternatively or in
26 addition, time limits may be used to limit rights of re-entry (that is, to condition
27 BC Hydro's future obligation to serve a departed customer).
- 28 • No-arbitrage provisions can ensure that system flexibility or trade income
29 (which benefits all ratepayers) is not reduced by retail access customers
30 purchasing from the market or delivering excess energy to BC Hydro during low
31 priced hours and purchasing from BC Hydro or not delivering sufficient energy
32 during high priced hours. These provisions can apply on an hourly or seasonal
33 basis. Seasonal arbitrage occurs if, for example, customers purchase from
34 external markets in the spring and summer (when market prices are typically
35 lower) and from BC Hydro at embedded cost rates in the fall and winter (when
36 market prices are typically higher).
- 37 • Transmission Access provisions. To the extent transmission intertie capacity is
38 reserved for retail access customers, there will be negative impacts on

1 BC Hydro's ability to trade system resources. Ensuring that BC Hydro recovers
2 its opportunity costs under such arrangements or requiring retail access
3 customers to competitively secure transmission under the OATT are two
4 possible solutions to mitigate these impacts.

5 **Comments on Objectives**

6 BC Hydro believes that the economic development and conservation objectives
7 identified in the ToR could plausibly be advanced by an appropriately designed
8 Retail Access Program.

9 The impact of retail access or bypass on the attainment of the environmental
10 objectives, as articulated in current policy, is a more complex question. Since
11 BC Hydro is currently in compliance with the 93 per cent clean energy generation
12 rule, it is true that if all new loads in B.C. were to take generation service from
13 self-supply or third-parties, this may help to nominally maintain the policy objectives.

14 For example, a thermal plant used by BC Hydro to supply customers must fit within
15 government's objective to achieve a 93 per cent clean energy generation portfolio.
16 Yet the owner of a generator that is a party other than BC Hydro (or another
17 prescribed utility), producing the same emissions is not currently required to have a
18 role in meeting that government objective.

19 This observation, combined with the knowledge that no other jurisdiction in the
20 western electric system offers as clean a portfolio as BC Hydro, means that while
21 retail access might facilitate meeting the literal objective of the policy, it can serve no
22 role in meeting the broader intent of GHG reduction.

23 ***Economic Development Objective***

24 Retail Access could potentially encourage incremental economic development or act
25 to retain existing load in the province by offering access to lower-cost electricity for
26 some industry. The ability of retail access to achieve these objectives needs to be
27 considered carefully, however.

28 As noted above, if a utility system has a given portfolio of fixed costs, and some
29 customers leave for lower-cost service elsewhere, this will tend to drive up the rates
30 for remaining customers.

31 BC Hydro has proposed preventing this outcome with no-harm principles. However,
32 such principles can act, by their nature, to deprive departing customers of all or
33 some of the value associated with their decision. As such, it should be remembered
34 that when retail access or bypass is appropriately cloaked in rules to prevent the
35 unfair shifting of value, the economic development advantages for the departing
36 customers can tend to disappear.

1 By extension of course, the protection of remaining customers improves their
2 economic condition, and this can have an important economic development
3 advantage.

4 Retail access can also negatively impact BC Hydro's system flexibility. For example,
5 if retail access energy is purchased from a third party wind facility, BC Hydro may be
6 required to backstop the retail access purchases when the wind facility is not
7 generating. This would result in decreased system flexibility as BC Hydro may need
8 to hold additional capacity in reserve that could have instead been used to facilitate
9 trade for the benefit of all ratepayers. If BC Hydro were required to offer "backstop"
10 services to departing customers, the no-harm principle would dictate that the rate for
11 these services fully compensate BC Hydro for its opportunity cost of providing them.

12 Retail access has also been advanced as supporting the policy objective of
13 enhancing economic opportunities for independent power producers (**IPPs**) to sell
14 directly to industry. While plausible in concept, the experience in B.C. has not borne
15 out the intended result. In fact, there were no examples where an industrial customer
16 sought to supply all or some of its energy needs from an IPP during the period when
17 this was permissible. This is not surprising, given the cost advantage of BC Hydro
18 and the complexities of IPP supply.

19 ***Conservation and Environmental Objectives***

20 A well-constructed retail access or bypass program could help BC Hydro meet its
21 objectives of reducing load growth and, by extension, reducing the need for
22 infrastructure additions. However, as noted above, the success of such a policy goal
23 would depend on both the underlying economics (the third party supply would have
24 to be less expensive than BC Hydro supply, either at the margin or on average,
25 depending on rules governing partial supply), and the program complexity (buying
26 from IPPs, buying from the market, or self-supplying involves high transaction costs,
27 including backstop and transmission) that must be compensated for in other
28 advantages received by the industrial customer.

29 In addition, it will be necessary for policy makers to parse the specific benefit that
30 they are seeking from conservation initiatives. In particular, if conservation objectives
31 relate to reducing upward pressure on BC Hydro rates, then benefits may depend on
32 the system load resource balance and whether infrastructure can be deferred.

33 If however, the objectives are environmental, then the issue becomes more
34 nuanced. Specifically, retail access should not (by itself) be expected to have much
35 effect on "global" environmental matters (such as greenhouse gas emissions). It
36 may, however, serve to improve some environmental pressures on local air, land, or
37 water if the effect of the policy is to push generation out of province.

1 In summary, BC Hydro does not think it will be possible to develop a RAP that
2 preserves the no-harm principle yet achieves meaningful uptake by industrial
3 customers. That is, taking account of the current relationship between BC Hydro's
4 embedded costs and the costs of new supply, and taking account of the large
5 transaction costs inherent in taking full or (especially) partial supply from the market,
6 BC Hydro cannot envision a RAP that would provide both a material benefit to
7 departing customers, and would satisfy the no-harm principle for remaining
8 customers.

1 **TSR Stepped Rate**

2 This section provides BC Hydro's comments in response to issues raised in the Task
3 Force Issue Paper that deals with the current TSR stepped rate (**RS 1823**) design
4 and the BCUC's 2009 Stepped Rate Report Recommendations.

5 Consistent with BC Hydro's introductory comments, BC Hydro suggests that the
6 Task Force recommend adherence to the structure of RS 1823, and make no
7 specific recommendations about its design. The Task Force should recommend that
8 government reserve specific rate setting matters concerning RS 1823 for the BCUC.

9 **Background**

10 There are two aspects in the Background section of the Issue Paper that require
11 clarification.

- 12 1. The 2002 BC Energy Plan was the genesis for the RS 1823 stepped rate
13 design, which is an inclining block conservation rate. However, the 2002 Energy
14 Plan also identified the broader requirement that RS 1823 encourage domestic
15 IPP development via retail access and incremental self-generation. In this
16 important respect, the objective of the rate is broader than just "conservation".
17 Further, after approval of the Negotiated Settlement Agreement, the CBL
18 Guidelines (TS No. 74) were expanded to ensure that existing customer load
19 growth would be treated the same as new customer load (in respect of access
20 to heritage energy).
- 21 2. The core rate design elements of RS 1823 (annual CBL, 90/10 split, revenue
22 neutrality, etc.) were directed by government through the interaction of the
23 2002 Energy Plan, 2003 Heritage Contract Enquiry and HSD#2. However, the
24 lower Tier 1 Rate was not designed to reflect embedded costs – Tier 1 is a
25 residual calculation to achieve revenue neutrality with the prior flat rate which
26 reflects BC Hydro's cost-of-service. It would, quite simply, have
27 over-determined the equation to define the 90/10 split, the pricing principle for
28 both tiers, and preserve revenue neutrality – some element of the pricing had to
29 be residual in nature, and the Tier 1 rate was selected for this role.

30 The Issue Paper identifies three rate design issues for discussion, summarized as
31 follows: (1) conservation is limited by the 10 per cent of CBL Tier 2 volume cap;
32 (2) the revenue neutrality definition has cost-shifting implications for Tier 2 rate
33 re-pricing; and (3) that customer uncertainty around CBL reset and adjustment policy
34 has had a "chilling effect" on energy efficiency investment. Each of these issues is
35 sufficiently complex that a more detailed analysis is required to properly inform the
36 discussion.

1 **Design Issue No. 1: Conservation is limited by the 10 per cent of CBL Tier 2**
2 **Cap**

3 This design element was discussed at length in BC Hydro's 2009 3-Year TSR
4 Summary Report. The Tier 2 cap does limit the conservation price signal (below
5 100 per cent of CBL) to 10 per cent of CBL.

6 It must be remembered, however, that in light of the Tier 2 pricing principle
7 (BC Hydro's avoided cost) and revenue neutrality principle, placing more of a
8 customer's load at the Tier 2 rate (e.g., moving to an 80/20 split) will act to lower the
9 Tier 1 rate. Any stepped rate design must contemplate the pricing signals that arise
10 from a customer operating its production with the Tier 1 price at the margin.

11 In addition, a 90/10 split mitigates revenue reduction risk associated with non-DSM
12 energy reduction events.

13 On a class basis, RS 1823 customers have operated at an average of 92 per cent of
14 CBL (F2007 to F2013). Within the class, a number of large customers consistently
15 operate near 90 per cent of CBL. The Issue Paper asserts this is evidence that the
16 90/10 split has "arguably run its course" and implies that an expanded Tier 2 band is
17 required to access further investment. This assertion is premature for the following
18 reasons:

- 19 • RS 1823 customers have been operating at or near the 90 per cent threshold
20 due to three primary drivers: (1) a high initial CBL based on 2005 consumption;
21 (2) conservation and self-generation investments; and (3) economic downturn –
22 including plant shutdowns. Item (1) is a one-time event. Item (2) is the intended
23 result of the rate. Item (3) is a snapshot from the normal fluctuations in
24 production across the economic cycle; this element will move in both directions
25 over a long-enough time frame, and the rate design must not be overly
26 sensitive to any particular place in the economic cycle. This is particularly true
27 in B.C., where industrial production can vary significantly in response to
28 macro-economic conditions.
- 29 • Recent amendments to TS No. 74 are designed to address each of these three
30 drivers over time. The outcome will be a progressive re-build of Tier 2 volumes
31 as business cycles stabilize and old Demand Side Management (**DSM**) projects
32 expire. The CBLs will be adjusted or reset to diminish, or remove, any
33 anomalies in the initial CBL levels. The TS No. 74 amendments reflect a
34 balanced approach that provides for a continuous, long-term renewal of the
35 Tier 2 price signal and DSM investment certainty for customers.
- 36 • RS 1823 customers have made, and continue to make, conservation
37 investments. BC Hydro believes that this reflects the RS 1823's relationship to
38 Power Smart Programs, including project incentives. Power Smart project
39 incentives provide an alternative to the default stepped rate benefit for the same

1 volume of energy savings. RS 1823 takes a longer-term view of conservation
2 investment, whereas incentives provide the targeted ability to acquire energy
3 savings at specific points in time.

4 All three of these points demonstrate that tariff improvements have been made in the
5 normal course of learning by BC Hydro and customers, and effective rate setting by
6 the BCUC (particularly TS 74). BC Hydro suggests that the Task Force not upset
7 that process with specific rate-design recommendations.

8 **Design Issue No. 2: Revenue neutrality definition has cost-shifting** 9 **implications**

10 Three fundamental design issues arise in this discussion: (1) the appropriate basis
11 for setting the Tier 2 Rate; (2) the “revenue neutrality” principle of the RS 1823
12 design that is used to calculate the Tier 1 Rate; and (3) the 90/10 allocation that
13 arose from the Heritage Contract Enquiry.

14 RS 1823 is revenue and bill neutral with the prior RS 1821 flat rate at 100 per cent of
15 CBL consumption. It was decided in the RS 1823 design that it would be the Tier 1
16 rate that “floated”. This means that the Tier 1 rate is calculated residually by the
17 formula below:

18 $90\% \times \text{Tier 1 Rate (calculated)} + 10\% \times \text{Tier 2 Rate (set based on the marginal cost of}$
19 $\text{new supply}) = \text{RS 1821 Flat Rate (adjusted for revenue requirement changes over}$
20 time)

21 Accordingly, the three drivers of change to the Tier 1 Rate are: (1) revenue
22 requirement changes; (2) changes in the prevailing cost of new supply options; and
23 (3) any change that is made to the 90/10 split.

24 BC Hydro does not see a compelling policy reason to amend the basic structure of
25 RS 1823. In particular, BC Hydro believes that:

- 26 • Charging a marginal price signal based on BC Hydro’s cost of new supply is
27 economically efficient;
- 28 • When established, preserving revenue neutrality meant that the introduction of
29 RS 1823 did not materially affect inter-class cost allocations and that the utility
30 did not over- or under-earn. These remain sound reasons for not adjusting this
31 criterion now, and outside a general rate design process that considers other
32 rates and other customer classes;
- 33 • The 90/10 split effected, at the time RS 1823 was set, a useful result that
34 coincidentally placed the calculated Tier 1 Rate near to the cost of service from
35 Heritage Assets. Preserving that split has the effect of retaining that relationship
36 as the revenue requirement changes, and new customer loads are added to the

1 system. It also offers revenue stability to the utility, and avoids any customer
2 receiving a below-cost price signal at the margin.

3 In summary, BC Hydro notes that there is a tight interrelationship between the
4 design elements of RS 1823, and a sound policy basis to each of the elements. The
5 Task Force should think carefully about these interrelationships before
6 recommending policy changes to any single element of the rate design.

7 **Design Issue No. 3: CBL reset/adjustment policy has had a “chilling effect” on**
8 **Energy Efficiency (EE) investment**

9 BC Hydro does not believe that the asserted “chilling effect” is supported by fact.
10 Despite the concerns of a small number of customers, RS 1823 customers have,
11 overall, invested hundreds of millions of dollars in new plant and EE investments that
12 realize, on average, annual energy savings of ~ 600 GWh that have been verified by
13 BC Hydro. A summary of such investment can be found in BC Hydro’s 3-Year TSR
14 Summary Report.

15 **Comments on Objectives**

16 ***Economic Development Objective***

17 As noted, BC Hydro’s stepped rate design was designed around two fundamental
18 objectives: (1) to encourage conservation; and (2) to offer an opportunity for IPPs to
19 serve industrial customers at the margin (i.e., for the last 10 per cent of their load).

20 Also as set out earlier, the latter of these two objectives was not successful. In short,
21 there is simply no significant gap between BC Hydro cost of new supply (which sets
22 the Tier 2 rate) and IPP’s cost of supply (which sets the competitive alternative). Yet
23 there is a significant transaction cost to taking IPP supply.

24 An extension of this reality is that there is also no discernable economic opportunity
25 for industry contemplating a shift to IPP supply, or self-supply, for that matter, except
26 perhaps to the extent that different environmental rules are allowed to apply to the
27 different supply alternatives.

28 BC Hydro believes that the Task Force should recognize this when it evaluates
29 RS 1823, and should focus its consideration of the rate on its role in advancing
30 conservation. Design ideas aimed at using RS 1823 for economic development
31 would be unsuccessful, and should not be allowed to dilute design approaches
32 aimed at encouraging conservation.

33 It would be incomplete, however, for BC Hydro not to observe that any inclining
34 block rate will tend, when considered directly, to discourage economic growth.⁴ This

⁴ Depending on the customer’s circumstance for increased electricity consumption, the price signal from an inclining block rate will tend to discourage existing industry from increasing production.

1 may lead to arguments for a return to flat rates, if economic development objectives
2 are deemed to have a greater importance than conservation objectives in this
3 instance.

4 However, this argument must be considered dynamically. That is, the static
5 observation that a lower marginal cost from flat rates will create more economic
6 activity must be tempered with an observation about how a reduction in conservation
7 will affect overall rate levels. That is, as load growth increases, the flat rate will tend
8 to approach the RS 1823 Tier 2 rate. This effect tends to diminish, but can never
9 eliminate, the argument that flat rates are more supportive of economic development
10 than is RS 1823.

11 ***Conservation Objectives***

12 By sending a marginal price signal equal to BC Hydro's cost of new supply, RS 1823
13 encourages efficient conservation measures. That is, it encourages customers to
14 make decisions to use or conserve energy based on its true cost.

15 Clearly, effective establishment and maintenance of CBLs is critical to retaining this
16 balance and efficiency and, as noted, BC Hydro believes that important steps have
17 been made in this regard.

18 ***Environmental Objectives***

19 For the reasons set out in the discussion of Conservation Objectives, RS 1823
20 sends an efficient price signal for consumption. However, from an environmental
21 perspective, this assumes that the price signal captures environmental externalities,
22 such as the cost of carbon.

23 In general in B.C., this is the case, as current policies compel BC Hydro to mitigate
24 its carbon footprint and to pass on the costs of doing so in its rates. It must be noted,
25 however, that where customers bypass RS 1823 (through self-supply, for example),
26 they may also bypass environmental costs imposed by policy.

27 The Task Force should recommend that any environmental costs that are
28 transmitted to industry through RS 1823 are non-bypassable, and that mechanisms
29 be put in place to ensure that this is true.

1 Postage Stamp Rates

2 The Task Force Issue Paper entitled Postage Stamp Rates deals with a range of
3 rate making issues including, but certainly not limited to, the matters generally
4 captured by the expression “postage stamp rates” (which means, narrowly, the
5 practice of not differentiating rates based on cost of service matters arising from
6 geographic location).

7 In particular, the paper encompasses several other rate-making issues, including
8 rate-vintaging (the question of whether to charge different rates to new and existing
9 customers), extension policies (the question of how much to charge new or
10 expanding customers for incremental facilities that they trigger – often taking in
11 matters related to rolled-in versus incremental rates), and end-use rates (the
12 question of whether to charge customers different rates based on the purpose to
13 which they put the energy they buy).

14 By way of example, the “issue” section that introduces the postage stamp paper
15 (which describes the tension between the economic development advantages of
16 new customers and their cost burden on existing-customers’ rates) is a question of
17 rate vintaging and extension policies, rather than a question of postage stamp rates.

18 This distinction is not simply semantics. These various rate-making questions
19 (postage stamp, vintaging, extension policies, and end-use rates) are discrete
20 matters with unique policy issues and implications, and the Task Force must
21 address them as such if its recommendations are to be effective.

22 This part of BC Hydro’s response will deal only with the narrow question of postage
23 stamp rates.

24 Definition and History of Postage Stamp Rates in B.C.

25 A postage stamp rate is a method of charging for service where the cost of the
26 service does not vary by location of delivery, even if the cost of providing the service
27 does vary. Postage stamp ratemaking is significant because it tends to represent an
28 exception to a general rule of setting utility rates, where customers are divided into
29 classes based (in some large measure) on having relatively similar costs to serve
30 them.

31 BC Hydro has a long-held policy of employing postage stamp ratemaking, consistent
32 with government policy on the matter. While evidence for the provincial policy of
33 postage stamp rates is not precisely set out anywhere, it has been an expressly
34 acknowledged policy of the Province since the early 1980s. It has never been
35 seriously varied or challenged and the BCUC has stated that the onus of
36 demonstrating the need for change rests with any party advocating a departure from
37 it.

1 Policy Perspective

2 The Task Force Issue Paper suggests that “customer fairness is a key driver in
3 using postage stamp rates.” This comment warrants careful consideration.

4 In a ratemaking context, the concept of “fairness” is typically linked directly with cost
5 causation. That is, a rate is deemed to be “fair” if the annual costs caused by a class
6 of customers is approximately equal to the annual revenues collected from that
7 class.

8 Importantly, the “fairness” rate-making criterion was relied upon heavily by the
9 BCUC in its recent rejection of applying postage stamp rates across areas served by
10 Fortis Energy and Utilities. The BCUC found, in that case, that where costs of
11 service did vary by region, a postage stamp rate would, in fact, have been unfair,
12 since it would have produced varying revenue-to-cost ratios as a function of
13 geography.

14 At a broader level, it would be unsurprising to find that it costs BC Hydro different
15 amounts to serve different geographic areas. Most notably, perhaps, it is often less
16 costly per customer to serve densely populated urban areas than it is to service rural
17 customers. A policy of postage stamp rates prevents charging rates that reflect that
18 difference, and from a rate-making perspective, that would typically be called unfair.

19 At a public policy level, though, the meaning of fairness can be far different, and this
20 difference may explain why the province retains a policy of postage stamp rates.

21 Utility ratemaking criteria are designed around a defined economic construct. The
22 monopoly utility should be allowed to earn a fair return on the capital it invests, and
23 customers should not suffer price discrimination (the exercising of monopoly power)
24 at the hands of the utility. This is a relatively closed system, and it assumes (or at
25 least contemplates) that the utility made the investment to make a profit and for the
26 benefit only of its paying customers.

27 BC Hydro’s Heritage Assets were not developed in this commercial construct, so it is
28 fair to ask if the allocation of the benefits arising from them should be judged on the
29 same criteria of “fairness” applied to other utility investments. That is, the
30 development of the Heritage Assets was an instrument of public policy, and their
31 ongoing use in that regard may well make appropriate a broader definition of
32 “fairness” than the one typically used in ratemaking.

33 BC Hydro believes that this is the reason postage stamp rates have prevailed as
34 policy in BC Hydro’s service area. BC Hydro also agrees with the BCUC that it
35 should remain the basis for rate-setting until such time as a party has demonstrated
36 a need for change.

1 As with the fairness issues, the Task Force Issues Paper is not absolutely clear on
2 the disadvantages of Postage Stamp rates. This is because the paper blends the
3 discussion of drawbacks of postage stamp rates with potential disadvantages that
4 arise from rate vintaging, or from the use of rolled-in versus incremental rate-making
5 for new customers (the latter being matters generally settled in extension policies).

6 One area where the Issue Paper does raise a disadvantage directly linked to
7 geographic issues is in relation to the impact of postage stamp rates on efficiency
8 (efficiency is another commonly used rate-making criteria).

9 As the Issues Paper notes, rates that charge differently based on location can serve
10 as an efficient signal telling new entrants where on the system they should locate.
11 However, the paper then identifies rates set through the use of Locational Marginal
12 Cost (**LMP**) pricing as a possible solution to this issue. Moreover, the Issues Paper
13 asserts that LMP accomplishes this in a manner that imposes the burden entirely on
14 new customers.

15 This conclusion requires some examination. While it is conceptually true that
16 LMP-based rates can send a powerful price signal regarding location, it will send
17 that signal to both new and existing customers. In other words, LMP pricing is based
18 on marginal cost, but it is not applied uniquely to the marginal customer. In an LMP
19 system, all customers at the “high cost” node will pay the high cost.

20 Indeed, it seems more likely that what the Issues Paper is referring to would be an
21 extension policy that directly assigns to the new customer not only the specific costs
22 triggered by its particular interconnection, but also an incremental “rider” based on
23 forecast system requirements for the specific area over time. Such an approach
24 would tend to push new entrants to areas of the system with surplus capacity and
25 away from areas with pending investment requirements.

26 It should be noted, however, that rate regimes of this kind are non-trivial to
27 implement. They also tend to be relatively inflexible, since in reality the option for
28 any particular enterprise to locate freely is often limited. As such, it is not always
29 clear that price signals actually work to efficiently affect location decisions – they
30 may, in fact, act to deter investments that would otherwise proceed (a potentially
31 inefficient outcome).

32 **Design Criteria Beyond the Issues Paper**

33 Beyond the matters related to the fairness and efficiency ratemaking criteria
34 described above, ratemaking should normally take account of other criteria,
35 including (1) effect on customer understanding; (2) cost-effectiveness to implement;
36 (3) impact on the ability of the utility to recover allowed costs; (4) impact on rate
37 stability; (5) avoidance of undue discrimination.

1 In respect of these criteria, elimination of postage stamp rates would tend to
2 contravene the understanding, cost effectiveness, cost recovery, and rate stability
3 criteria. For the same reasons set out in the fairness discussion, postage stamp
4 rates improve “fairness” only in the broader policy context, particularly given the
5 circumstances surrounding development of the Heritage Assets.

6 **Comments on Objectives**

7 Viewed at a provincial level, the presence or absence of postage stamp rates will
8 have very little impact on the policy objectives at issue under the Task Force’s
9 Terms of Reference.

10 One theoretical exception to this observation would occur if one were to presume
11 that new entrants to the market had perfect mobility and were sufficiently responsive
12 to electricity prices that any regional discount would attract the new industry. Under
13 this highly unrealistic assumption, one would expect industry to locate where
14 conservation signals were lowest, and (by extension) consumption and economic
15 expansion were most encouraged. Realistically, this would not be the result of the
16 modest price differences arising from a move away from postage stamp rates.
17 Nevertheless, the one-sidedness of the bet in favour of economic development and
18 away from conservation is worth observing.

19 It may be more likely that existing industry would be economically damaged, or
20 encouraged to conserve more, if they found themselves in a high cost location.
21 Offsetting this would be windfalls and excessive consumption in low cost areas.
22 Whatever the net result (and it would be very hard to predict), there can be little
23 expectation that such a change would be either material or socially useful.

24 In short, BC Hydro sees no reason for the Task Force to conclude, when considering
25 the policy basis of its mandate, that there should be a departure from postage stamp
26 rates.

1 End-Use Rates

2 The expression “end-use rates” is used in the Issues Paper in a generic way to refer
3 to any rate that is applicable to a type of customer or load, including rates that meet
4 the UCA requirements and the Bonbright rate design criteria, and those that do not.

5 The former includes the E-Plus rate, which was approved by the BCUC through a
6 normal rate application on the basis that it allowed BC Hydro to maximize the value
7 of surplus energy when access to export markets was limited and for the benefit of
8 all customers; the latter category includes the Shore Power rate, which was
9 established through the *Shore Power Regulation* BC Reg 291/2008, for the purpose
10 of reducing emissions in Vancouver Harbour from on-board diesel generators - an
11 objective that is not one the BCUC may lawfully advance through rates insofar as
12 the rate designed to meet that objective does not also meet the statutory standards
13 and rate design criteria.

14 Rates that were the result of the *Power For Jobs Development Act*, the *Economic*
15 *Development Electricity Rate Discount Act* and the *Critical Industries Act* are all
16 examples of the latter type of end-use rate.

17 In BC Hydro’s view it would be beneficial for the purpose of this Review if the
18 distinction was identified, and the different regulatory issues raised by the difference
19 acknowledged.

20 Further, BC Hydro’s position is that end-use rates that can be justified within the
21 current statutory provisions of the UCA and the Bonbright criteria are appropriate in
22 all cases, to the extent the BCUC determines that they meet those criteria after a
23 normal rate design process.

24 End-use rates that cannot be justified on the basis of the rate-setting provisions of
25 the UCA and the Bonbright criteria, and which by implication are intended to serve
26 Provincial objectives beyond the scope of the BCUC’s jurisdiction, should continue
27 to be the subject of Provincial direction, whether through special purpose legislation
28 (e.g. *Power for Jobs Development Act*) or through regulation (e.g. *Shore Power*
29 *Regulation*).

30 Comments on Objectives

31 End-use rates are a catch-all term for any rate aimed at a particular class or load. To
32 the extent these rates vary from normal rate-setting criteria, they may be designed to
33 encourage a particular behavior or industry, or discourage it.

34 For example, Power for Jobs or Shore Power rates tend to encourage consumption
35 of electricity, for economic or environmental reasons, respectively. Equally,

1 proposing high electricity rates for LNG production may encourage conservation
2 through self-generation incentives.

3 As such, it is impossible to comment generally on the policy effect of end-use rates,
4 except to observe that they are, by their nature, able to effect policy objectives quite
5 effectively. BC Hydro has no position on the use of end-use rates to achieve these
6 policy ends, provided that the mechanism used to implement the rate is consistent
7 with the legal and rate-making matters set out above.