

British Columbia Utilities Commission  
INFORMATION REQUEST NO. 1 TO E-PLUS HOMEOWNERS GROUP

British Columbia Hydro and Power Authority  
2015 Rate Design Application Module 1  
Intervener Evidence

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- 1.0 Reference: Exhibit C10-4, Evidence of E-Plus Homeowners Group (EPHG), p. 2  
Aggregation of small and scattered loads

On page 2 of the evidence, EPHG describes the Residential E-Plus group now uses only 0.18 percent of BC Hydro's generating capacity and it is impossible to claim that E-Plus impacts other BC Hydro customers in any significant way.

On the same page, EPHG states that without good reason, BC Hydro diverted from its original position that the Residential E-Plus rate would continue and be allowed to end by attrition.

- 1.1 In Appendix C-1B of the 2015 Rate Design Application, on page 93 of 115, BC Hydro describes that as part of the 2013 Integrated Resource Planning (IRP)<sup>1</sup> recommended Action 2, it has initiated a Residential capacity-focused demand-side management pilot to test aggregating scattered, small loads. It further says that aggregation of many small loads, including residential E-Plus loads, could have a material benefit for localized constraints. Is the EPHG aware of the IRP Action 2 recommendation? Is the recommended Action 2 from the 2013 IRP, a good reason for BC Hydro to improve on its ability to call on the amount of interruptible power? If not, why not?

**Response:**

**EPHG were not previously aware of the "Action 2" recommendation, and were not part of the 2013 IRP, but have reviewed the page referred to in the question. The statement "could have a material benefit for localized constraints" is at best highly speculative. If BC Hydro wishes to use this argument then we believe they have a responsibility to both substantiate and quantify their claim. Unless this is done we do not believe this should enter into the BCUC's decision of whether and by how much BC Hydro should be allowed to "improve on its ability" to interrupt. Furthermore EPHG have doubts that this kind of "straw that broke the camels back" argument is valid.**

- 2.0 Reference: Exhibit C10-4, Evidence of EPHG, p. 2; Exhibit B-23, BCUC IR 2.142; IR 2.143.1  
Existing Wording of the Current Tariff

In the evidence, EPHG states that BC Hydro's proposed changes are intended to change the fundamental understanding on which E-Plus was originally based, and to considerably increase the potential for curtailments by removing key protections that were intended to ensure fairness, and reduce hardship, in their implementation.

BC Hydro states in response to BCUC IR 2.142.1 that the current terms of Special Condition 1 are outdated within its current planning and operational framework. The change in wording allows BC Hydro the flexibility to interrupt Residential E-Plus service if there is a need and adds value to BC Hydro and non-participating customers.

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<sup>1</sup> The 2013 IRP was approved by the Lieutenant Governor in Council in November 2013 (Exhibit B-17, p. 2)

- 2.1 Please describe if the fundamental understanding referred to in the preamble includes BC Hydro's practical ability to interrupt Residential E-Plus customers. If not, why? If so, in what ways do the proposed changes alter the fundamental understanding?

**Response:**

While the question of “practical ability” to interrupt was never specifically identified as part of the “fundamental understanding” referred to, we accept that there would have been no point in introducing the E-Plus rate without this. In fact, in our Evidence Section 3.1, page 6 we argued that the ability to interrupt must have existed when the program was introduced (and that to argue otherwise would imply “negligence or incompetence” by those who designed the program and error by those who approved it). However we went on to say “BC Hydro has provided no clear evidence that as a result of changing circumstances they cannot now practically interrupt E-Plus in the way that was originally intended”. We noted that BC Hydro's input in this regard, including their response to BCUC IR #2.142.1 relies on generalities such as statements that E-Plus is “outdated”, not “flexible”, and no longer “practical”, or the assumption that it should conform to the same terms as for other interruptible rates (see response to IR 3.2 below). We suggested that “if E-Plus power has never been interrupted the likely reason is that conditions have never come to pass when they could reasonably do so”, and “We do not see a lack of interruptions in the past as sufficient reason to deem E- Plus a failure and or to broaden the grounds for interruption.”

EPHG is not arguing that BC Hydro should be denied the ability to practically interrupt E-Plus if they can conclusively demonstrate that they currently cannot do so. Rather, in our Evidence we argue that if this is the case it can only be because BC Hydro created a program that “was not robust enough to stand the test of time” (Section 1, page 4) and that it would be unfair for E-Plus customers to be penalized or to otherwise bear the sole burden of BC Hydro's failure, especially when the potential “value” added for other customers is undefined and arguably very small. We also question whether the extent of the changes proposed is necessary in order to maintain or restore the “practical ability” to interrupt.

The “fundamental understanding” that is altered by BC Hydro's proposed changes is the framework of rules and restrictions (e.g. permanence, priority over other non-firm customers, adequate notice etc.) that were the basis of residential E-Plus customers signing formal agreements with BC Hydro when joining the program and that were intended to protect those customers against unfair or unnecessary interruptions in their electric heat. BC Hydro proposes to ignore all of these, in order to increase “opportunities” for curtailment. It appears to EPHG that BC Hydro is asking for almost unfettered ability to interrupt E-Plus power for reasons and under circumstances that are only generally and vaguely defined. They do so without clearly demonstrating why the current rules are unworkable, what the benefits will be of changing them, and whether the proposed changes meet the tests of “just, reasonable and not unduly discriminatory”.

Additionally we have argued that E-Plus customers have already been forced to accept a significant financial penalty through the withdrawal of the “transferability” provisions of the rate in 2008 and that any further burden imposed on them through proposed changes to the rate would be grossly unfair (see also response to IR 2.2.1 below).

2.2 In EPHG’s opinion, in what ways will the proposed changes to Special Condition 1 end up considerably increasing the potential for curtailment? Can the ‘increase’ be quantified?

**Response:**

See also response to IR 2.1. The specific changes proposed to Special Condition 1 are first, to broaden the grounds for interruption from a “lack of hydro power” to a shortage of either energy or capacity, and second, to remove the requirement that a shortage cannot be “provided economically from other energy sources”. The first change speaks for itself in terms of broadening potential for curtailments. The second is of particular concern; the current language seems reasonable, and the need for change unclear. Why would BC Hydro not supply E-Plus customers with power if they can do so economically? When BC Hydro is constantly buying and selling power it would appear to be easier for them to declare a shortage, without fear of challenge, with the changes proposed.

The change to language is supported with a proposed business practice and this in turn is informed by letters sent to EPHG and by other Evidence that detail the full extent of the changes BC Hydro proposes, including:

- Removing the priority over other non-firm customers that was previously assured for Residential E-Plus customers. Instead of being the last to be curtailed they could be the first.
- Reducing the requirement for 30 days notice to only 2 days. Instead of curtailments being based on major but infrequent events such as unusually low reservoir levels, they could be imposed for a wide variety of short term energy and capacity concerns.

In the opinion of EPHG the proposed changes could be characterized as expanding and extending the circumstances under which residential E-Plus power could be curtailed far beyond those which were envisaged when the E-Plus rate was designed, promoted, and “sold” to customers.

To quantify the increase is not within our capability. We believe this is a responsibility that should fall to Hydro, in making their arguments. The onus is on them to make the case for change, not on E-Plus homeowners to defend against it. In that regard we believe it is impossible to quantify the outcome of the proposed changes for the reason that they involve removing the framework of rules and restrictions that currently ensure the fair management of E-Plus, instead leaving this almost entirely to BC Hydro’s discretion.

2.2.1 BC Hydro provided the probability of interrupting a Residential E-Plus customer in response to BCUC IR 2.143.1. Would EPHG consider this unreasonable given its discount from the default Residential rate?

**Response:**

**We cannot provide a direct answer to this question, for two reasons:**

First we have no reason to believe that the “probability” estimate by Hydro is any more than a guess, and it only refers to interruptions caused by “cold weather events”. BC Hydro has indicated that they will be looking at a number of other “opportunities” to curtail E-Plus power (for example, refer to their responses to BCUC IR #2- 143.8 and IR #2-144.1.1). As discussed in our Response to IR 2.1 and 2.2 above, if BC Hydro’s proposals are implemented they would have many more such opportunities to interrupt than has been the case in the past.

Second, the question assumes a direct relationship between the “cost” of interruptions and the benefit of the discount received by E-Plus customers, whereas we believe there are many other factors that must be included in any such “cost/benefit” type of analysis. This was discussed at length in our Evidence (Section 3.2, pages 7 to 9). The most obvious cost factor is the initial expense for those who installed back-up systems when building E-Plus homes, but for many the greatest financial impact that needs to be offset by discounted rates is that imposed when “transferability” of the E-Plus rate was terminated in 2008. Although the financial impact of this is deferred, it is very significant. Many current customers assumed the E-Plus rate when they bought their homes, prior to the end of transferability in 2008, and in most cases paid a premium price for an “E-Plus home”, an amount that they will not be able to recover on sale. In fact, since prospective purchasers will be faced with either heating their homes electrically at very expensive “Tier 2” rates or spending large amounts to convert their homes to more economical heating systems (where that is even possible) E-Plus heating has become a liability upon resale. For recent purchasers especially, it will be very difficult, and perhaps impossible to achieve any kind of financial “break even” through the rate discount.

2.3 In the opinion of EPHG, should interruption provisions be similar for all interruptible rates provided by BC Hydro? If not, why not?

**Response:**

**No, it is completely reasonable that interruption provisions should vary among interruptible rate customers. Reasons given in our evidence include:**

Residential E- Plus customers are the most unsophisticated and vulnerable of non-firm power customers and do not have the technical, legal or business expertise to monitor interruptions, sales to other non-firm customers, the conditions that led up to a lack of surplus or to otherwise ensure that agreed upon practices are being followed and curtailments are not being imposed casually, unnecessarily or punitively. This concern would be magnified greatly under the proposed changes which give much more latitude to BC Hydro in imposing interruptions.

Without such an assurance BC Hydro could, for example, push residential E-plus customers off the rate by expanding sales (including exports) to other non-firm customers until there was a demonstrated shortage of power and interruptions became too frequent or too long to tolerate.

The ability of residential E-Plus customers to respond to interruptions on short notice (as BC Hydro proposes) on a 24 hours/day, 365 days/year basis is obviously much less than that of industrial or commercial customers.

There could be serious, unintended social and human costs attached to interruptions; as an example, senior citizens in Northern communities could be rushing home from family visits or otherwise struggling to respond to interruptions on short notice while non-firm power was being sold to industry or exported.

We understand that BC Hydro has many different rate schedules, with different provisions, covering different types of customers. Nowhere, to our knowledge, are the same rate schedules applied to residential customers as to commercial or industrial users. BC Hydro’s suggestion that interruptible power supplied to home heating must be subject to exactly the same terms and conditions as the “shore power” supplied to cruise ships appears ridiculous.

**3.0 Reference: Exhibit C10-4, Evidence of EPHG, p. 3  
BCUC Jurisdictions on rates and services**

On page 3 of the Evidence, EPHG states:

BC Hydro is taking a strong position that they are not bound by any such prior commitments made to E-Plus customers because the BCUC has sole jurisdiction over rates. BC Hydro's actions appear to challenge the boundaries of BCUC jurisdiction versus civil contract law. **This potential conflict was recognized and discussed in the 2007 RDA hearings.** Without revisiting those earlier arguments regarding the enforceability of BC Hydro's commitments, we submit that they should be recognized and given strong consideration by both BC Hydro and the BCUC as a matter of fairness to customers, ethical business practice, and to protect the integrity of the process of power supply and regulation in British Columbia and the public's faith in that process. (emphasis added)

- 3.1 Please confirm that in the BCUC 2007 RDA decision<sup>2</sup>, the Commission, on page 133, made the determination that it was not persuaded by the E-Plus Group's argument that its members have "contracts" with BC Hydro. If not confirmed, please provide EPHG's interpretation.

**Response:**

**See below.**

- 3.2 Please confirm that in the BCUC 2007 RDA decision, the Commission did not find the relationship between BC Hydro and its E-Plus customers to be of a commercial nature. If not confirmed, please provide EPHG's interpretation.

**Response to IR 3.1 and 3.2:**

**EPHG's understanding of the findings of the Commission in the 2007 RDA decision is that the Panel drew a clear distinction between their jurisdiction over BC Hydro rates and any "commercial agreement" that might exist between BC Hydro and E-Plus customers in regard to those rates.**

**In regard to IR 3.1, our interpretation is that the Panel confirmed their "statutory jurisdiction over rates", and that flowing from this they could not be bound by any argument that agreements relating to rates constituted a "contract" between BC Hydro and customers as that would compromise their jurisdiction. Acknowledging that decision, EPHG is not arguing in this hearing that a contract exists between its members and BC Hydro, although we take that position without prejudice to the rights of E-Plus customers to take action against BC Hydro under commercial law.**

**In that regard we do not agree with the interpretation proposed in IR 3.2. Rather we interpret the Commission's decision as acknowledging that a relationship of a "commercial nature" might exist, while taking no position on this matter. We base our interpretation on the statement on page 133 of the decision, "The Commission Panel will make no findings as to the nature of the commercial relationship that might exist between BC Hydro and its E-Plus customers", as well as the statement on**

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<sup>2</sup> In the Matter of British Columbia Hydro and Power Authority 2007 Rate Design Application Phase-1 Decision, October 27, 2007

page 134 where in regard to a specific point of argument the Commission stated, “if it remains an issue, it is a commercial issue between BC Hydro and its E-Plus customers which is more appropriate for determination by the courts, if necessary”.

Regardless, as quoted in the question statement, we believe that commitments made by BC Hydro to E-Plus customers should be given strong consideration by the BCUC as “a matter of fairness to customers, ethical business practice, and to protect the integrity of the process of power supply and regulation in British Columbia and the publics’ faith in that process”.

**4.0 Reference: Exhibit C10-4, Evidence of EPHG, p. 3  
Reasons for opposing proposed amendment of the “Special Conditions”**

On page 3, EPHG gave its reasons for opposing BC Hydro’s proposed amendment and proposed Business Practice. EPHG believes that the Residential E-Plus rate should be left unchanged and allowed to end naturally by attrition.

4.1 In the 2007 RDA decision, on page 136, the Commission directed BC Hydro to pay more attention to the exercise of its rights under the E-Plus rate schedules. Does the EPHG believe that BC Hydro’s proposed amendments and business practice is in compliance with this Commission directive? If not, why not?

**Response:**

**No. EPHG believe the direction given BC Hydro on page 136 (“the Commission Panel directs BC Hydro to pay more attention to the exercise of its rights under the Rate Schedules and to invest the necessary time and resources to ensure that its E-Plus customers comply with the Special Conditions of the Rate Schedules ...”) was related first, to BC Hydro ensuring that E-Plus customers fulfilled their obligations under the E-Plus agreements such as maintaining adequate supplies of fuel and back-up heating systems in good condition, and second, to ensuring that BC Hydro were taking advantage of any “opportunities” that they had to interrupt power under the terms of the language and understandings that existed at that time.**

In addition to the language of the decision, our belief is supported by BC Hydro’s actions subsequent to the 2007 RDA:

- **BC Hydro wrote to all E-Plus customers to remind them of their obligations under “the agreement” (referred to as such). They later asked customers to confirm in writing that they were meeting those obligations. We understand that customers who could not or would not do so were removed from the rate.**
- **BC Hydro did not alter, or propose to alter their business practices at that time. If they had felt that the 2007 RDA decision gave them licence to do so it would be reasonable that they would have taken such follow-up action.**

We also noted, in Section 4.1 page 15 of our Evidence, that during the 2007 RDA hearings neither BC Hydro nor the Commission panel challenged EPHG’s stated position on key commitments of the “E-Plus Agreement”, including priority over other interruptible customers and adequate notice, which are among the major changes now being proposed. If the intent of BC Hydro or the Commission was to undo these commitments in a way that corresponds to the “proposed amendments and business practice” then it is reasonable to expect that they would have made that clear in their arguments and in their decision, respectively.

**5.0 Reference: Exhibit C10-4, Evidence of EPHG, p. 3  
Ending or phasing out the E-Plus rate**

On page 3, EPHG gave its reasons for opposing BC Hydro's proposed amendment and proposed Business Practice. EPHG believes that the Residential E-Plus rate should be left unchanged and allowed to end naturally by attrition.

In the 2007 RDA decision, on page 135, the Commission made its findings that the evidence before that proceeding failed to demonstrate that the E-Plus rate no longer exceeds the low short-run marginal energy costs that would exist in a period of surplus energy or no longer make any contribution to offsetting the fixed costs of BC Hydro.

5.1 If the test articulated in the 2007 RDA decision is not met, does EPHG agree that the E-Plus rate has outlived its usefulness? If a rate has outlived its usefulness, should it be phased out?

**Response:**

**We find the first part of this question confusing. By our reading, the part of the 2007 RDA decision quoted indicates that the Commission found that there was no proof that the "test" had not been met at that time. We expect the question is a hypothetical one, based on the assumption that BCUC will now rule that the test is no longer being met. In that case, we cannot fully agree with the statement that E-Plus has outlived its usefulness. E-Plus would still serve useful purposes – for example by providing a safer, cleaner, more environmentally friendly option for home heating than other alternatives, and by offsetting the inherent disadvantage faced by customers in (mainly rural) areas of the province still not served by NG. In view of the large amount of new generating capacity coming on line in the years to come there might also be an argument that E-Plus customers may have more value to BC Hydro in the future.**

**In regard to the second part of the question we do not agree that the possibility that E-Plus may have "outlived its usefulness" is in itself a justification for phase out. Many of the other factors and considerations we presented in our submission of Evidence would also have to be weighed when addressing this question.**

**In any case the E-Plus rate is already being phased out over time as a result of the 2007 RDA decision to end "transferability". Since then the number of Residential E-Plus accounts has fallen by almost 40% and with E-Plus customers being an older demographic (over 80 percent being 55 or older) attrition is currently continuing at a rapid pace reaching 10 percent in one year between 2015 and 2016. This existing phase out is imposing a significant financial penalty on E-Plus homeowners at the time they leave their homes as discussed in our Evidence Section 3.2, page 9 and also in our response to IR 2.2.1 above. An earlier phase out would accelerate the imposition of that penalty to a time when it could have much greater impact on their personal finances and well being (compared to when they sell their homes or die).**

5.1.1 In response to BCUC IR 2.146.3, an E-Plus customer consuming at the median of the E-Plus class consumption is expected to be billed about \$1,400 annually for energy charges whereas this same customer billed under the residential inclining block rate is expected to pay about \$2,140 in energy charges. What is the view of EPHG on the E-plus rate and the need to encourage conservation?

**Response:**

The view of EPHG is that the E-Plus rate does not discourage conservation. The concept that higher rates will lead to lower usage may have some merit when averaged across a large and varied population, however E-Plus customers are a group with some very specific attributes and circumstances that do not apply to the general population.

- The decision of many who joined the E-Plus program was at least partly prompted by environmental concerns – i.e. E-Plus was promoted as being a “clean” alternative to fossil fuels, and appealed to those who are conservation minded.
- Although there were no formal requirements set by Hydro as regards energy efficiency many E-Plus homeowners report that their homes were built to a very high standard, both because they were environmentally conscious and because this was necessary in order for backup systems to be sufficient to heat their homes. The potential savings from the E-Plus program helped justify the associated capital costs for this.
- The average age of E-Plus customers is considerably higher than the general population (over 80% are over 55 years) and includes many pensioners on fixed income. We believe that this demographic is very sensitive to the costs of running their homes.

We also note that even at the E-Plus rate electricity is not an inexpensive heating method, and with recent large increases to electricity costs and decreasing costs of NG in particular, any advantage E-Plus might have over other heating systems has diminished. As E-Plus customers all live in single family homes and in most cases have no NG service for appliances and water heating, (E-Plus was not made available to homes with NG service) much of their non-heating power is at Tier 2 rates (the E-Plus discount only applying to power used for heating). Also, many E-plus users face higher than average power bills because they live in rural areas with electric water or sewage pumps and other special needs. Even with E-Plus rates, customers’ power bills are substantial and are a subject of considerable focus and attempts to economize.

Although the accusation implied in the question has been made in the past, we understand that BC Hydro has been unable to supply any evidence based on a like-to-like comparison of similar homes in similar parts of the province that would support it.

- 5.1.2 What is the view of the EPHG on the E-Plus rate and the E-Plus cost of service revenue/cost ratios of 0.45 (heating load Generation energy costs assigned) and 0.65 (heating load Generation energy costs not assigned) relative to the remaining Residential revenue/cost ratio of 0.95? Does EPHG recognize that its rate is being cross-subsidized?

**Response:**

EPHG do not have the technical expertise to evaluate whether the revenue/cost ratios reported are correct, or whether E-Plus is being cross-subsidized. We understand that the question of how best to estimate the cost of service for E-Plus has been a controversial question since the time of the 2007 RDA. If the BCUC panel determines that the rate is cross-subsidized then the impact of that must be weighed against the other Evidence submitted in determining what is just and reasonable.



**6.0 Reference: Exhibit C10-4, Evidence of EPHG, p. 5  
Financial investments of E-Plus homeowners**

On page 5 of the EPHG Evidence, it states that joining the E-Plus program was not an inexpensive, easy or obvious decision. It states that joining E-Plus was a long-term commitment and it is unlikely that homeowners would have signed-on if they had not been assured that they would be protected from future changes in the key terms of the rate.

6.1 The E-Plus rate was introduced in 1987, closed in 1990 and cannot be transferred as of 2008. In the opinion of EPHG, at the current discount of around 50 percent of standard rates, would all Residential E-Plus customers have recovered their initial investment? If not, what is a reasonable average pay-back period?

**Response:**

**We cannot directly answer these questions as they appear to be based on two assumptions that we believe are incorrect, specifically:**

- **that the “initial investment” is the only financial factor, or the predominant factor to be considered, and**
- **that recovery of the initial investment was in some way a basic understanding of the E-Plus Agreement.**

**Refer also to Section 3.2 of our Evidence where this is discussed in detail, as well as to our response to IR 2.2.1 above. The long term commitment referred to reflects the cost and difficulty of leaving the E-Plus program as much as it does the cost of joining or maintaining eligibility. Because of the impact of the decision of the 2007 RDA to end transferability these costs will have to be faced by all customers in time. Although the financial impact of losing the E-Plus rate is deferred, it is very significant and for some this alone may exceed the amount recovered through the rate discount.**

**In the 2007 RDA Decision (page 134) the Commission panel specifically stated “the Rate Schedules before the Commission have never made reference to the customer’s [initial] investment or their need to earn a return on and of it”.**

**7.0 Reference: Exhibit C10-4, Evidence of EPHG, pp. 14, 15; Exhibit B-23, BCUC IR 2.143.6.3**

According to EPHG, BC Hydro’s proposed Business Practice ignores one of the most important assurances given to E-Plus customers when the rate was introduced, that Residential E-Plus customers would be given priority over other non-firm customers. The promise of priority lies at the heart of the E-Plus Agreement.

BC Hydro’s response to BCUC IR 2.143.6.3 indicates that there is no established hierarchy of interruption for non-firm services; and given the E-Plus business practice, which requires BC Hydro to provide Interruption Notice two days ahead, BC Hydro would interrupt E-Plus customers when resources are forecast to be limited even if the situation does not actually materialize.

- 7.1 Would an established hierarchy of interruption for non-firm services, with E-Plus Residential customers given priority over other non-firm customers during interruption, be a mitigating factor in the proposed amendment?

**Response:**

**Yes. EPHG have provided ample evidence that there is an “established hierarchy” giving priority over other non-firm customers. This is the most important protection offered and the one that has the most value to E-Plus customers in terms of ensuring that their power will not be interrupted without careful consideration and adequate reason. Priority also protects against the possibility that interruptions will flow from future actions by Hydro such as expanding sales to other non-firm customers including export markets.**