

**Project No. 1598958**  
**RESPONSE TO : Application to Amend Net Metering Service under Rate Schedule (RS) 1289**

**British Columbia Utilities Commission (BCUC or Commission)**  
**British Columbia Hydro and Power Authority (BC Hydro)**

BC Hydro writes an application to amend Net Metering Service under Rate Schedule **(RS) 1289 (Application)**, in accordance with BCUC Order No. G-3-19.

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BC Hydro has submitted their application under the Title “**Amend Net Metering Service under Rate Schedule (RS) 1289**”.

This document forms the response to the specific items contained in this application. BC Hydro has made this a lengthy application which means that a response to each part of the application will also be lengthy. We give a summary and then will proceed to work through the details of the application with the responses.

There are two sections to this response; the first addresses some of the comments made in the preamble to the suggested “BCUC Order and secondly the responses to the sections of the suggested “BCUC Order”.

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**Summary:**

The application is made with regards to rate amendments. The rates referred to are the rate for which BC Hydro will pay for any surplus power produced via the Net Metering Program. The application includes many more issues than this. The overall application is to increase the cost of residents installing “green technology” and entering the Net Metering Program. This increase in the “barrier” to the net metering program is seen with the request to increase the red tape (more inspections, more qualifications), cost (more permit fees), loss of privacy (application to allow any BC Hydro employee to enter your home at anytime for any reason) and finally by reducing or eliminating any chance to account for the cost of the installation/operation and maintenance of the green power generation by discounting the price paid for surplus energy produced.

The rationale for the application is unclear as this is an application so contrary to the last few applications for rate amendments. The premise of this application is not outlined and as a result does not address what the issue is that this is the solution for.

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**Section by Section response:**

**Outline**

The Application starts with a cover letter. The cover letter is the rhetoric to support the application. The application then goes through many sections of related issues, which eventually make up the final submission. The crystallisation of the application could be seen in the form of a proposed BCUC ORDER G-XXXX (Appendix C) at the end. This is what the final application is being made for. It is the final BCUC proposed order that spells out the

full extent of this application (viz not just rate amendment. The application has many items included in this submission which have hitherto never been discussed publicly.

Rhetoric

BC Hydro uses rhetoric in this application which takes from a hard application to an emotional application, for instance to be using phrases such as section 4 “ **minor changes to the clarity, simplicity, and safety of the program**” when in fact these are major changes to both prices/costs and personal freedoms (eg right of entry to private property etc). Rhetoric is not really useful in this kind of situation and makes this application more of a political document than one of an amendment to some rates.

### **The Cover Letter**

That as it is, we will respond to both the claims and assertions of the cover letter and the proposed BCUC Order G-XXX.

It is worth noting that the document and submission by BC Hydro is unnecessarily long with many duplications, all of which deters the general public from responding and which makes many of the responses appear duplications.

The cover letter clearly outlines the key issue motivation for the application:

#### **1. Introduction**

**17 The 2018 Amendment Application was an interim step to address Oversized  
18 Generating Facilities while BC Hydro conducted a broader review of the Net  
19 Metering Program (Program) and its requirements, including customer and  
20 stakeholder engagement.**

*1.1 continues on to summarise the program so far, it claims that the objectives of the program reflect the regulatory history of the program. However, the summary is skewed as a big part of the regulatory history has been the calculation and setting of the price for the credited power remaining at the end of the producing year (that is supporting the payment of surplus power produced and indeed promoting it). Indeed this has been the reason for applications in 2004, 2008, 2009, 2011, all addressing the price to paid to program participants for the surplus power at the end of the year. **It can hardly be claimed that is not part of the history and indeed part of the program's intention.***

**Section 1.2 makes the claim in the Title that the proposed amendments will maintain the program intent, fairness, simplicity and safety. This is to be achieved via 5 amendments:**

BC Hydro have stated five amendments, however, as we will see these do not correlate with what has been discussed in the public consultations, anywhere else on the applications stages, or in the proposed ORDER. In fact we see that only the second amendment is the one which has been applied for and the other four are totally new and not previously discussed and as such do not relate to this application.

The five listed amendments (with notes added) are

1. **The entire 2018 Amendment application;** *which is the current application.*
2. **Anniversary date for billing / credit calculations.** *This is something of an superfluous issue and not really relating to the issue being addressed (introduction 1.1)..the rate paid for surplus power produced by customers (3 below)*
3. **Update energy prices from 9.9cents.** *This is the core intent of the application (introduction 1.1)*
4. **Make minor changes to the clarity, simplicity, and safety of the program.** *This statement implies that the changes are of little consequence and are “minor”, however should we page ahead to section 5, and the “special conditions sections found in section 12 of the appendix C there are some staggering additional requirements which are not necessary given the existing safety requirements and are extremely onerous, such as*
5. *BC Hydro will have the right to enter the Customer’s Premises at all*
6. *reasonable hours, without notice to the Customer, to inspect the*
7. *Customer’s protective devices and read, inspect and/or test meters,*
8. *or to disconnect the Generating Facility. Nothing in the foregoing*
9. *terms and conditions will limit or otherwise affect any rights of entry*
10. *to the Customer’s Premises BC Hydro may have under any other*
11. *sections of the Electric Tariff or any other agreement with the*
12. *Customer.*

This example of additional requirements added to the application are not “minor additions” and are certainly not related to the issue as stated in the introduction 1.1. Indeed most of these additional requirements (as we will see later) increase the barriers of participation, do nothing for increasing the safety of the program and will actually cost both the participant and BC Hydro more money to implement. Clearly the rhetoric “make minor changes...”) is just that as this is not borne out in the details.

## **5. Maintain the current energy price of 9.9cents for existing customers.**

This does nothing to address the issue of what happens to the customers who did want to apply but were turned away upon application; what about the customers who wish to provide the additional supply of electricity, supporting the “green technology” by purchasing, installing, operating and maintaining power generation systems to relieve or reduce future infrastructure developments by BC Hydro (which

are not using “green technology” and could be construed as environmentally harmful (damming up valleys and such). These individuals have already been denied this opportunity and with this application will so be.

These amendments, BC Hydro claim, respond to the Engagement Survey \Results, Jurisdictional Review, the evaluation reports. None of these are comprehensive and substantive reasons to amend the program by cutting out the existing payment for surplus energy produced by participants, at their expense, and making the program more inaccessible to the general public. This source of the justification of the amendments is not substantive it is only relying on these avenues.

**BC Hydro continues on the claim:**

***Hydro believes that the proposed amendments are fair and provide a balanced***  
***23 approach that avoids substantial costs to BC Hydro and non-participating***  
***customers***

***24 while allowing for limited cost-shifting to support the Program. BC Hydro***  
***expects that***

***25 the proposed amendments will have either a limited or beneficial impact on***  
***most***

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***customers in the Program and that the overall financial im 1 pact of the***  
***proposed***

***2 amendments will be minimal***

This is the first time BC Hydro introduces the concept that non-participating customers are in some way encountering substantial costs on account of the surplus power being paid for. This concept was touched on in the Webinar, however was never properly justified. However this is addressed later in section 7.3 so we will revisit this later. However, this discussion is pre-empted with a table which hopes to justify the claim that the purchase of the surplus power is costing both BC Hydro and non participating customers. This table has flaws in its logic and does not include all the variables BC Hydro and the BCUC used in previous applications to justify rate increases for the surplus power produced. Some of the issues not addressed and would counter this application:

1. The assumption that power produced by net metering participants does not decrease the day time power requirements of BC Hydro, and so help BC Hydro avoid many costs, reduce future infrastructure expansion needs, conserve reservoir water for night time consumption and for drought and low precipitation summers.
2. There is no provision for the net metering participant to re-coup the cost of the equipment, installation and operation to provide this power

3. BC Hydro has a global obligation to be more environmentally aware and involved. The damming up of valleys is not regarded as environmentally friendly or green technology. This program provides this part of BC Hydro's effort to produce power with "green technology" at no expense to BC Hydro.

Should these and other compelling variables be included in the cost of the surplus energy purchase by BC Hydro then a more balance picture appear which may well show that the net metering participant is subsidising BC Hydro by supplying power at only 9.9cents which allows BC Hydro to resell this at rates up from 9.9 cents to its customers. The assertion by BC Hydro is not clearly justified.

### **In section 12.1 BC Hydro clearly states the issue is to**

These amendments would prevent additional  
20 Oversized Generating Facilities, maintain the intent of the Program as a way for  
21 customers to offset their electricity consumption and would support fairness and  
22 flexibility. The amendments would apply only to future applicants to the Program  
and

23 would have no impact on existing customers in the Program.

By re-stating this statement does not change the situation as it was first stated in 1.1.

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### **2 1.2.3 Amendments Will Improve Fairness Between Participating and 3 Non-Participating Customers**

4 BC Hydro is proposing to update the Energy Price paid for the Generation Account  
5 Balance remaining in the Customer's Generation Account at their Anniversary Date  
6 from 9.99 cents per kWh to an amount that reflects the price BC Hydro can sell the  
7 electricity for on the regional wholesale market. This amount would be determined  
8 every January 1<sup>st</sup> based on the daily average Mid-Columbia prices for the previous  
9 calendar year,

In this section BC Hydro proposes that the price paid for surplus power is commiserate with the price one would get on the open market. This section has skipped a fundamental step in the reasoning. Firstly, it has missed the unique situation we have with BC Hydro: BC Hydro is not intended as a for profit corporation, rather it has a mandate set by the Minister of Energy, which is spelled out in her letter

*quote Michelle Mungall Minister of Energy, Mines and Petroleum Resources, letter April 2018 to Kenneth Peterson, Chairman BC Hydro ) is*

*to provide its stakeholders (the residents of BC) , firstly lowest price (affordable) electricity to make life more affordable, and second to provide a service people can count on*

*and finally to support economic growth (build a strong, sustainable, innovative economy) from the available resources in the province.. (see attached letter from the Minister to BC Hydro Chariman).*

No where does it recommend that BC Hydro should seek to make a surplus to sell on the open market. The power produced by the net metering program is not intended to boost BC Hydro's sales to the USA, it is to boost the energy produced by "green technologies".

The power produced by the net metering participant is power that is sold to other customers of BC Hydro with the expectation that BC Hydro need not produce so much power, and thus make savings to both BC Hydro and the environment.

This reasoning would conclude that the net metering participant should be compensated for the surplus power produced at a rate commiserate with the sale price of that power, less transmission costs, to existing BC customers. It is immaterial what rate BC Hydro may be able to get for surplus power sales, since this is not about generating surplus power for sale, this is about generating power, with "green technology" to comply with the mandate set out by the Minister.

#### **Section 1.2.4 Minor Amendments Will Support Clarity, Simplicity and Safety and <sup>18</sup> Reflect Existing Program Practices**

Again in this section we see the pre-ambule that this section is

*proposing various minor amendments to RS 1289 to improve the clarity, <sup>20</sup> simplicity and safety of the Program and to reflect existing program practices.*

We will address this in more detail with section 5 of the application, however the note here is that what is being proposed are "minor", which can be nothing more but an understatement of some major proposed changes. This is both misleading and deceptive.

#### **Section 1.4 Regulatory \History**

This section outlines some of the many applications that have been made by BC Hydro to the BCUC. It does not include the 2004 application, nor the 2009 application. Both these applications accept, promote and clearly show that the intent of the program is ALSO to provide compensation for the power produced by net metering participants over and above the power needs of the participant. The BCUC further states that there is to be payment for this power. This is excluded from the discussion on the intent of the program, as seen in the omitted applications. For some reason the arguments supporting the increases in the rates paid in 2008 and 2014 are no longer applicable today|?

#### **<sup>12</sup> 2.1 Regulatory History Demonstrates that the Program Was <sup>13</sup> Intended to Help Customers Offset Their Own Supply With**

## 14 **Balanced Approach to Program Costs**

15 Section 1.4 above reviews the regulatory history of the Program, including the  
16 following statements by the BCUC (emphasis added):

17 • The Commission's support for a net metering tariff is conditional on  
18 development and implementation that does not incur any substantial cost on  
19 the utility.

20 • Customer generation should be limited to own use only at the registered  
21 location of the net metering installation.

This is not substantiated as the BCUC goes on to say that participants should be compensated for the power they do not use..... this demonstrates the de-facto acknowledgement that the BCUC intends power produced beyond the needs of the participant are intended and to be paid for fairly.

22 • The Commission considered that it would be fair if net metering customers were  
23 compensated for the value BC Hydro receives from net excess generation.

No where has the BCUC outlined that compensation should be commiserate with the USA market price for power purchase. This statement is misleading and untrue

24 • A 50 kW system size is consistent with the intent of net metering to allow  
25 individual customers to meet all or part of their electricity demand.

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• The Commission Panel believes that limited cost-shifting to non-participating  
2 customers is warranted to support the implementation of net metering for  
3 distributed renewable generation.

*This is addressing the issue of compensation when considering other programs which had secured rates significantly higher than the current rate existing customers where be charged. It is out of context*

4 In summary, the BCUC has previously stated that the intent of the Program is to  
5 allow individual customers to meet all or part of their electricity demand, that  
6 customer generation should be limited to own use only, that customers should be  
7 compensated for the value BC Hydro receives from net excess generation and that  
8 while limited cost-shifting to non-participating customers is warranted, the Program  
9 should not incur any substantial cost on the utility.

**This summary is accurate however it justifies paying participants a rate based on the rate BC Hydro sells that power to its existing customers (not USA wholesale customers) as this power supply would have replaced the supply by BC Hydro (not added to it). This is a key point which has been omitted in all discussion and reason.**

## **Section 2.7**

Many of the grounds for the proposed amendment stem from the Webinar and its subsequent survey.

BC Hydro did conduct two webinars, and during these webinars emphasized the unfairness of the current level of payment for the surplus power generated by stakeholders, of 9.99 cents/KWh. This point was not justified in the webinar, merely stated as fact. In essence the stakeholder who has paid for the equipment, installation, operation and maintenance has helped BC Hydro avoid these costs and at the same time provided some power production from “green technologies” for BC Hydro. The avoidance of these costs is a benefit to BC Hydro. BC Hydro has made claims that the actual amount of costs avoided is negligible and not to be counted. However on the same score then the amount of power generated by the net metering program for BC Hydro is also negligible and the payment for the surplus likewise. Looking forward, there may be a day when the volume of power produced is not negligible and the costs avoided by BC Hydro by the program are no negligible, then this whole issue may be worth re-visiting. Until that time, the program encourages sustainable, green energy at no cost to BC Hydro. Meanwhile BC Hydro is collecting for the power produced between 10 and 15cents / KWh as charged to the stakeholders.

This point is not made in the webinar nor is there any provision in the survey. The result is that the survey and webinar do not address the issues at hand, but give only BC Hydro’s issue and proposal.

BC Hydro insist that rather than a benefit, the payments to net metering program participants is a substantial cost to BC Hydro. The tables and justifications for this are erroneous as they claim the net metering program represents a loss of sales to BC Hydro. BC Hydro is not in the business of beating out the other suppliers, but rather providing affordable living and economic benefit to the stakeholders. By reducing the volume power required to supply the stakeholders of BC Hydro, the net metering program is acutally removing costs and future investment needs from BC Hydro with no actual cost to BC Hydro. This point is clearly avoided.

The survey does not open up the opportunity to discuss that the amendment is not in keeping with the unique position BC Hydro has, but rather works on the premise that BC Hydro is a corporation with the objective to make a profit. If this were the case then we would have more utility companies and separate transmission lines companies. The Crown Corporation is intended to be for the benefit of its stakeholders |(as the Minister outlined) with opportunity for profit to come from biproducts not its sole intent. This premise and all that leads from it was not permitted with the survey. The result is that many who looked at the survey did not complete it as it was based on a false premise.

The results of the survey show

*12 ► 43 per cent of Engagement Survey participants supported the proposal of  
13 maintaining the amendments included in the 2018 Amendment Application,  
14 with additional changes to provide greater flexibility, compared to the  
15 alternative proposal of having no requirement regarding the size of a  
16 customer’s Generating Facility and a reduction to the Energy Price.  
17 ► 23 per cent of Engagement Survey participants provided other suggestions.  
18 42 per cent of those responses indicated potential support for making the  
19 2018 Amendment Application amendments ongoing, with suggestions to*

20 provide additional flexibility to meet customer needs. BC Hydro has  
21 considered these suggestions and reflected some of those suggestions in  
22 our proposal.

This actually means that **only** 43% of those who completed the survey supported the application as presented, while **57% did not**. The survey was not conclusive and certainly does not support the amendment application as it was presented in the Webinar and the survey.

## 8 **4 Amendments Will Improve Fairness Between** 9 **Participating and Non-Participating Customers**

BC Hydro states in this section the premise upon which they have based the entire application for a rate change for the energy price paid for the generation account balance remaining to the customer at the end of the 12 month period. The premise stated is:

*“ (the amount to be paid) reflects the price BC Hydro can sell the  
14 electricity for on the regional wholesale market. This amount would be determined  
15 by calculating the average of the daily average Mid-Columbia market prices over  
the 16 previous calendar year. “*

The premise is incorrect, **BC Hydro is not in the business of generating power to sell on the open market (as would a private corporation want to sell to the highest payer and buy from the lowest price supplier).**

BC Hydro is set up by the residents of BC to supply reliable and inexpensive electricity to its residents, any only then would surplus be sold on the open market. This more accurate premise would lead to the discussion of power supply management to incorporate green energy with the existing power generation infrastructure. (such as using dam produced power for night time and restrict dam produced power for day time demand). This premise then would negate the further arguments BC Hydro make that there is something unfair about paying customers who produce a surplus for their surplus power, when in fact this same power is being supplied to the same demand and prices higher than the 9.9cents/KWh.

It is beyond argument that BC Hydro will receive power from residents via the Net Metering Program with out any cost of equipment purchase, installation, operation and maintenance. This power that is then supplied to BC Hydro will have cost BC Hydro nothing and will be sold to residents for the same price AS IF BC Hydro had produced the power (ie 10 cents or greater), and allow BC Hydro to produce less power and so increase its capacity for the future (maintaining water levels in the reservoirs / dams).

BC Hydro is not in the business of producing power to sell on to the USA, this is only a bi-product.

21 **4.2 To Reflect Value Received, Energy Price Should Reflect the**  
22 **Short-Run Price, Not the Long-Run Price**

23 *The current Energy Price of 9.99 cents per kWh is generally consistent with the price*

24 *paid under BC Hydro's SOP. As discussed further in section 4.6 below, BC Hydro*  
25 *indefinitely suspended the SOP in February 2019.*

26 *The link between the SOP price and the Energy Price is based on the premise that*  
27 *the Energy Price should reflect a long-run value instead of a short-run value.*

28 *BC Hydro believes that this premise is incorrect and should be re-considered.*

29 *RS 1289 does not impose any delivery obligations on customers in the Program.*

30 *This means that customers in the Program are not obligated to send any energy to*  
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*BC Hydro and consequently,*  
*BC Hydro is unable to*

1 *consider generation from the*

2 *Program as part of its supply side resources. This means that energy from the*  
3 *Program does not have a long-run value because it cannot be used to displace or*  
4 *reduce BC Hydro's need to acquire new generation resources, over the long-term.*

5 *If energy from the Program cannot be valued at a long-run price, then it must be*  
6 *valued at a short-run price that reflects its value at the point in time that it is*

7 *received. The short-run value of energy received by BC Hydro is determined by the*  
8 *regional wholesale energy market as this is primarily where BC Hydro sells or*  
9 *acquires energy on a short-run basis.*

It is unclear in this statement why Solar energy is not long term. The participant will buy the equipment (which is usually guaranteed for 25years) install it, maintain it and operate it, in the hope that BC Hydro is in this for long term in such a way that it will be both beneficial financially and practically for the participant. As pointed out many times on the BC Hydro website, this is an expensive venture for any participant. This is a long term, long run, sustainable value to BC Hydro. The stated premise is just not true, the customer has to deliver the power to BC Hydro, they are not permitted to re-sell the power to any one else as an independent utility. The energy produced from this program can indeed be increased significantly and be used to displace or reduce the need to acquire new generation resources. There is no reason here, just the straight unsubstantiated dogma that this program cannot be considered long run. The fact is that the green power generators (solar etc) is here to stay and is purchased/installed for the long term.

23 **5.1 Clarification Would Help Prevent Unsafe Connections**

24 *As explained in section 9.1.6 of the Evaluation Report, some BC Hydro customers*  
25 *have installed generation at their residences or businesses without BC Hydro's*  
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knowledge or approval. This unauthorized generation may 1 pose a safety hazard to  
2 BC Hydro employees and other customers, and can negatively impact power  
quality

3 and reliability.

This section is the pre-amble to \BC Hydro making application to permit sweeping powers based on an argument of safety. The program as it stands at present safeguards against this very situation. Firstly every application and installation approved by BC Hydro can only be implemented with a BC Electrical Permit, which is administered by \Technical Safety BC with the *Safety Standards Act* . This means an electrical permit has to be issued, the installation has to be inspected by an electrical inspector who is trained in residential, commercial and industrial code and ONLY then can BC Hydro be notified that the installation is complete and the power generator system connected. The system is already dealing with this one issue and needs no further change. In addition to this, the safety standards in place demand that every installation has an automatic shut off should the power from BC Hydro go down (cease), as well as a manual shut off. Further to this, should there be any concern of this BC Hydro can, via a smart meter, shut off the power to the location.

At present there is no need for change.

21 **5.3 Proposed Amendments Allowing Termination and Rejection of**  
22 **Certain Applications Would Provide Clarity and Support**  
23 **Safety and Simplicity**

BC Hydro have combined a number of issues in this section. They are

1. Non-integrated areas may not be permitted to produce power for BC Hydro. If this is the case then those areas should be permitted to produce the power for re-sell via an alternative utility. There are many locations in BC (such as McBride etc) who experience “Brown Outs” regularly. These areas need more power and BC Hydro claims they are “non-integrated”. The problem is not related to the rate issue or this application to change the net metering program. This issue is greater and needs addressing in another application.
2. BC Hydro has been rejecting net metering applications based on the outcome of this present BCUC Rate Application 1289. Furthermore, many approved applications are indeed greater than the expected consumption as part of the plan to pay for the “green technology” power installation. When BC Hydro applied to either not pay for surplus power or vastly reduce the amount from 9.9cents to less than half, all these applicants have waited on their installations to see the outcome of this application to the BCUC. If they are not going to receive any payment for the surplus power produced then the project will either have to be changed or abandoned. BC Hydro has delayed the BCUC hearing on this application for months (nearly a year) and so these approved projects are also delayed. BC Hydro cannot now claim that

*BC Hydro has noticed that some accepted applications to the Program*  
19 *have remained inactive for one year or longer and the customers responsible for*  
20 *those applications have not proceeded to connect a Generating Facility to*  
21 *BC Hydro’s system. When an application is inactive for a prolonged period of time,*  
22 *the data provided and assessed by BC Hydro will likely become outdated.*  
*Therefore,*  
23 *BC Hydro is proposing an amendment so that applications expire 18 months after*  
24 *BC Hydro’s acceptance, if the customer has not received BC Hydro approval to*

25 *connect their Generating Facility to BC Hydro's system. Customers with expired*  
26 *applications would be able to re-apply to the Program*

BC Hydro cannot now expect all these applications to have to re-apply simply because BC Hydro has delayed the BCUC hearings and also delayed committing to purchasing surplus power at the BCUC agreed amount.

## **6.1 Vast Majority of Customers in the Program Are Not Materially 4 Impacted by Proposed Energy Price Update**

5 As shown in [Table 5](#) of section 2.2, in fiscal 2018, the vast majority of customers in  
6 the Program (1,044 or 80 per cent) received no Surplus Energy Payment and of the  
7 256 customers who received a Surplus Energy Payment, 215 or 84 per cent  
8 received a payment of less than \$500.

This section is somewhat confusing. BC Hydro is claiming that the amount paid out for surplus is minimal and of no real consequence (less than \$500 per customer who has surplus power). Then is making this application as if this is a big issue.

The reality is that this is a big issue since the future of power production is Green Technology and not flooding (farmland, forestry and habitat), nuclear power and so on. Green technology needs to be encouraged and indeed some kind of incentive provided to help BC Hydro enter this means of production without the huge associated costs. The Net metering program is a very small start of this process. It is imperative that those who wish to buy, install, operate and maintain the solar power generator to supply surplus to BC Hydro, be encourage and not hammered with zero payments for their initiative.

BC Hydro boldly claim, with no substantiation, that

15 *Overall, this means that the vast majority of customers are not materially impacted*  
16 *by an update to the Energy Price as they are likely to either not receive Surplus*  
17 *Energy Payments or receive minimal Surplus Energy Payments.*

*ALL applications received in the last year which support a surplus of power generation have been denied; more people are also denied even prior to applying, and even those who are approved are holding back from installation to see if indeed it is worth installing a system to generate a surplus. The material impact of this application is huge on the future of "green technology" being established in BC.*

9 *Given the installed capacity and volume of the energy generated by customer*  
10 *Generating Facilities in the Program at this time, the cost-shifting between*  
11 *participating and non-participating customers is not material. However, over time,*  
as  
12 *the Program grows, the cost-shifting could become material.*

13 As discussed in section 8.1 of the Evaluation Report, at this time, the installed  
14 capacity and volume of energy generated by customer Generating Facilities in the  
15 Program is too small to result in any appreciable avoided cost benefits to BC  
Hydro  
16 and non-participating customers. However, over time, as participation in the  
17 Program increases, BC Hydro may be able to recognize certain additional benefits  
18 from the Program. For example, Austin Energy has a “value of solar” tariff that  
19 recognizes benefits such as loss savings, energy savings, generation capacity  
20 savings, fuel price hedge value, transmission and distribution capacity savings and  
21 environmental benefits.<sup>6</sup>

## Application to Amend Rate Schedule (RS) 1289 for Net Metering Service Appendix c Revised Tariff Pages Draft BC Hydro Rate Schedule 1289 – Revision 2 Effective:

Following the summary introduction to the BCUC application, BC Hydro has provided a draft proposed Order. This is extremely beneficial to understanding the full intent or “what does this all look like” of the application. Despite all the rhetoric in the first section this draft proposal cuts the arguments to just the request. We have significant comments on the suggested “BCUC Order” as proposed by BC Hydro as this application to the BCUC now appears to include a lot more than a rate change application. However, we feel compelled to address the preamble to this, which constitutes the bulk of the BC Hydro submission.

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### 6. OTHER RATE SCHEDULE 1289 – NET METERING SERVICE

#### Definitions

**Availability:** The application is not clear if this clause also sets out to limit the net metering to just “..any Residential Service Customer and for any General Service Customer” ,

It is not clear if a small business, farm or any organisation is excluded from this, or do they call into the “general” category. If this is an attempt then to eliminate the program from all BC Hydro customers, other than residential, then this is counter to the intent of the program to encourage “green technology” power generation. There is no reason why any customer, which could be farmer, small business, tourist cabins and so on, could not benefit both themselves and BC and apply

for the net metering program as long as the application was within the limits of the program (27Kwh and 99Kwh systems).

#### **Rate:**

*Rate Schedule 1289 is available to those Customers receiving Service under this Rate Schedule as of April 20, 2018, and those Customers whose applications have been accepted by BC Hydro in writing, prior to and including April 20, 2018*

BC Hydro propose to back date the rate to applications already approved however this does not account for those applications on hold until the BCUC hearings and those who were turned away until the outcome of this hearing. The incentive to apply and indeed commit to install these systems are predicated on the Net Metering Program as promoted and detailed by BC Hydro, as such until the program changes are indeed verified by a BCUC Order then BC Hydro ought to be bound by the Net Metering Program as promoted. The rate change will effect new applications, following the outcome of the application.

#### **Annual Energy Output**

*: "Annual Energy Output" means the calculated annual energy output for a Generating Facility and will be calculated as follows:*

*Generating Facility's nameplate rating x capacity factor x 365 days  
X 24 hours, where the capacity factor is:*

- 10 per cent for photovoltaic;*
- 20 per cent for biogas, thermal and wind;*
- 30 per cent for fuel cell; and*
- 40 per cent for hydro,*

BC Hydro proposes to have different rates for different generators. The whole argument for a rate change is that BC Hydro does not want to pay for surplus power. How then is it that they are prepared for instance to pay for up to 40% surplus of Hydro produced power and only 10% of the surplus of solar produced power. Clearly there is an inconsistency in the logic. Either the power is surplus and is going to be paid for or not. The rate change cannot imply that water generated power is more valuable than solar generated power (both have their seasonality, and daily fluctuations).

*4. BC Hydro may determine that a site acceptance verification is required. In that case:*

- (a) the Customer will be notified;*
- (b) BC Hydro will inspect the installation of the Generating Facility and may require the Customer to supply additional information and provide access to the Customer's Generating Facility to carry out additional inspections, as described in the DGTIR-100 or other interconnection requirements applicable to the Generating Facility, and*
- (c) the Customer must pay the Net Metering Site Acceptance Verification Fee.*

The current system already fulfils the concerns of safety. The local Government employed and trained electrical inspector issues permits and inspections, there is no need to add an additional inspection to this existing inspection. BC Hydro currently does not have qualified inspectors for this application (residential and commercial hydro installations). This would incur significant costs to BC

Hydro which eventually would be paid for by the applicant, and would create an additional barrier to applying and installing a green technology power generator (such as solar).

### **Special Conditions**

**3. To receive Service under this Rate Schedule, the Customer must submit the required application. For Generating Facilities having a rated generating capacity of greater than five kilowatts, and for which BC Hydro determines that a site acceptance verification is required, the Customer must also pay the Net Metering Site Acceptance Verification Fee as set out in section 11 (Schedule of Standard Charges) of the Terms and Conditions of the Electric Tariff.**

This fee as set out is onerous and a big dis-incentive to get on board with the program. The existing process provides for a government inspector to inspect both the site and facility prior to installation and prior to approval of the installation. This is duplicating the process and costs. In addition, currently BC Hydro does not have the personnel to do this kind of inspection.

**.4. A Customer who (a) utilizes a synchronous generator, (b) takes Service at a Primary Voltage and/or (c) utilizes a Generating Facility with a nameplate rating greater than 50 kilowatts, will pay all associated incremental costs for connection of the Customer's Generating Facility as set out in Terms and Conditions section**

This definition has automatically changed the applications for up to 99Kwh to less than 50Kwh, by adding to the cost of the installation the BC Hydro costs on the BC Hydro side of the meter. BC Hydro is now not only looking to get the power generation paid for by the customer but also the regular transmission line infrastructure costs which would still be present even if the system was not to be installed. Again we see that this is a hidden barrier dissuading customers from installing power systems.

**5. The Customer must not commence parallel operation of its Generating Facility until written approval has been provided to it by BC Hydro. Written approval will normally be provided by BC Hydro within 14 days following BC Hydro's receipt of a copy of the final inspection report or approval issued by the governmental authority having jurisdiction to inspect and approve the installation. Where Customer has been notified that inspection and acceptance by BC Hydro's Field Services – Protection and Control Department will also be required before the Generating Facility will be accepted for parallel operation, BC Hydro's approval will normally be provided within 14 days following the date of inspection and acceptance. BC Hydro may require the Customer to supply additional information and/or provide access to the Customer's Generating Facility to carry out additional inspections, as set forth in BC Hydro's DGTIR-100 or other interconnection requirements applicable to the Generating Facility.**

This is already in place with the existing government electrical inspection. This duplication of inspections makes for more delays, red tape and a barrier to the program

**6. the Customer will design, install, operate and maintain the Generating Facility, and all ancillary facilities on the Customer's side of the Point of Delivery in accordance with all governmental laws and regulations from time to time applicable, and BC Hydro's**

**DGTIR-100 or other interconnection requirements applicable to the Generating Facility. Customers will obtain and maintain any required governmental authorizations and/or permits required for the installation and operation of the Generating Facility. The Generating Facility will meet all applicable safety and performance standards, including the codes and standards identified in BC Hydro's DGTIR-100 or other interconnection requirements applicable to the Generating Facility. The Customer will be responsible for the safe and proper operations of the Generating Facility consistent with the requirements of the regulations of the Safety Standards Act. BC Hydro, acting reasonably, may from time to time prescribe additional requirements which in its judgment are required for the safety of its system.**

This is not new and this requirement removes many of the additional inspections etc (see above) BC Hydro have included in this application. This is currently in place and works well.

**10. If Service under this Rate Schedule is suspended or Terminated for any reason, and BC Hydro considers it necessary in its discretion for the Customer's Generating Facility to be re-inspected and approved prior to resuming parallel operation with BC Hydro's system, the Customer will pay the costs that BC Hydro estimates that it will incur for the re-inspection and approval.**

This is a new issue, never previously discussed publically. Once a facility is inspected and installed, and as already outlined no other changes made unless with a new application, then there are no reasons to give BC Hydro to "re-inspect " at the customers cost. And solely at the discretion of BC Hydro. This is not necessary for the operation of the net metering program and is one further avenue for red tape and costs to the customer and to the stakeholder of BC Hydro.

**15. If BC Hydro in its discretion deems it necessary to require the Customer to interrupt or disconnect its Generating Facility from BC Hydro's system, or for BC Hydro to itself effect the interruption or disconnection of the Generating Facility from its system, as provided in Rate Schedule 1289, or such interruption occurs as a result of suspension or Termination of Service to the Customer in accordance the provisions of Rate Schedule 1289, then except to the extent caused by the wilful misconduct or gross negligence of BC Hydro, its servants or agents, BC Hydro and its servants or agents will not be liable to the Customer for any loss or damage whatsoever resulting from the exercise of such rights by BC Hydro.**

It is unclear what the issue is with this section. The overriding power being permitted in this section is that BC Hydro can terminate (interrupt or disconnect) the generating system solely at the discretion of BC Hydro. There are no requirements or situations listed. This is juxtaposed with the liability of costs if the disconnection occurs as a result of suspension or termination. The two parts are not related and the first part is not acceptable as this basically permits BC Hydro to cancel the net metering program on a house by house basis, thus avoiding any BCUC or public consultation process. The second part is outlining that BC Hydro is blameless for any liability that may be caused by a termination or suspension of the net metering service.

**16. BC Hydro will have the right to enter the Customer's Premises at all reasonable hours, without notice to the Customer, to inspect the**

***Customer's protective devices and read, inspect and/or test meters, or to disconnect the Generating Facility. Nothing in this Rate Schedule will limit or affect any rights of entry to the Customer's Premises that BC Hydro may have under any other sections of the Electric Tariff or any other agreement with the Customer.***

Section 14 is presumably justified on the basis of safety. However, the requirements for automatic disconnects, manual disconnects and so forth on the customer side of the meter and BC Hydro's ability to disconnect via the smart meter, the pole and the transmission centre all mean that the power has many back up ways for its disconnection. The section 14 does not outline what kind of situation this applies to. It gives every BC Hydro worker unlimited access to personal and private property under the guise of "inspecting customers protective devices etc" . This whole section has many unacceptable aspects to this. There are very few situations in law that permit unlimited, un-requested, access to private property by any employee of a corporation.

This single item creates a huge barrier which would prevent many homeowners, farmers, businesses etc from applying for any permit or solar installation.

The application to the BCUC is to do with rates for surplus power produced by customers. There is no where has this application been discussed to include whether any BC Hydro employee (or anyone for that matter) has access to private property for any reason at any time for any length of time. This section has not been discussed at any meeting or public involvement, has not been included in any BCUC documentation and is perhaps unconstitutional in its legality.

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IN Conclusion:

### **The Big Picture**

The establishment of green technology, using the sun and other means of power production is an expensive and long term project. BC needs to enter this program and the Net Metering program is the start!

BC Hydro has a special place in BC as it is owned by its residents, and as such is bound to be supplying electricity reliably and with low, non profit rates (it is not in the business of making a profit from its stakeholders). With the diminishing annual rain/snow we need to use the existing dammed water wisely. It makes total sense to use the sun for the day time power production and night to use the water production of power.

The future power demands are increasing (with the advent of electric cars etc) BC Hydro needs to provide incentives to encourage its resident stakeholders to invest in green technology to produce power. The future power demand is far greater than the present supply, in addition the future rain and snow fall is also extrapolated to be decreasing. BC and BC Hydro need to establish solar and other green technology power supplies.

It makes no sense that BC Hydro should increase the barriers of establishing this objective by the proposed increase in red tape, permit costs, and reduction of price paid for power produced. The barrier needs to be reduced, such as it is as easy for a resident to buy/install/operate/maintain solar power as it is for a hot water boiler or heat pump. The equipment (inverters) available nowadays are equipped with automatic safety features (such as automatic shut off etc) and plug and play capability. The days of buy the solar power system and plug it in are here, and yet BC Hydro are looking at preventing this huge resource being implemented with this application.