



Suite 410, 900 Howe Street Vancouver, BC Canada V6Z 2N3 bcuc.com P: 604.660.4700TF: 1.800.663.1385F: 604.660.1102

# British Columbia Hydro and Power Authority

# **Transmission Service Rate Design Application**

Decision and Order G-353-23

December 15, 2023

Before:

T. A. Loski, Panel Chair C. M. Brewer, Commissioner A. C. Dennier, Commissioner

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#### COMMISSION ORDER G-353-23

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#### **Executive Summary**

On March 16, 2023, British Columbia Hydro and Power Authority (BC Hydro) filed with the British Columbia Utilities Commission (BCUC) a Transmission Service Rate (TSR) Design Application (Application). BC Hydro proposes to replace its existing default Rate Schedule (RS) 1823 (Stepped Rate) and RS 1827 (Rate for Exempt Customers) with a new, flat rate structure (RS 1830 or Proposed Flat Rate), to be phased in over a three-year period. BC Hydro's Proposed Flat Rate is revenue neutral and has a lower flat energy charge and a higher demand charge relative to the Stepped Rate. In addition, BC Hydro proposes certain tariff changes to other rate schedules that are linked to the Stepped Rate.

The existing Stepped Rate consists of a two-tier rate energy charge and a demand charge. There are approximately 150 customer sites currently taking service under this rate. BC Hydro's new rate proposal under RS 1830 consists of a flat energy charge of \$44.39 per megawatt hour (MWh) and a demand charge of \$11.00 per kilovolt ampere (kVA) in fiscal 2024 dollars. The Proposed Flat Rate is revenue neutral for the Transmission service customer class and collects the forecast revenue requirement based on the fiscal 2024 forecast revenue of \$938.5 million.

BC Hydro states that the Proposed Flat Rate aligns with government policy objectives and improves economic efficiency, flexibility, and customer understanding. BC Hydro proposes a transition to the Proposed Flat Rate that provides for gradual implementation over three years, as well as flexibility to allow customers with Customer-funded demand-side management (DSM) projects with remaining duration the option to stay on the Stepped Rate for two more years (Proposed Transition). All customers will pay the Proposed Flat Rate starting in fiscal 2027.

BC Hydro submits that 30 customer sites, which account for 46 percent of total Transmission service rate class revenue, will experience bill increases of between zero and 4 percent. Seventeen customer sites, which account for 10 percent of total Transmission service rate class revenue, are expected to see bill increases greater than 4 percent. Sixty-eight customer sites, which account for 44 percent of total transmission rate class revenue, will experience bill decreases.

The Panel approves the Proposed Flat Rate, effective April 1, 2024, and the Proposed Transition. The Panel finds the proposed demand charge to be a reasonable balance between cost recovery and mitigating customer impacts. The revenue neutral energy charge is a balancing function after setting the demand charge, and the Panel finds this approach to be reasonable.

The Panel acknowledges that customers with remaining Customer-funded DSM duration may be negatively impacted by flattening the energy charge. However, the Panel finds that the Proposed Transition strikes a fair balance between an immediate change to the flat energy rate and delaying implementation. The gradual change over two years allows affected customers to continue bill savings and time to prepare their operations for the flat energy rate. The Proposed Transition results in a reasonable revenue shortfall to be absorbed by all ratepayers.

As part of this decision, the Panel also approves BC Hydro's proposal to match the proposed flat energy rate of RS 1830 for RS 1880, RS 1891, and RS 1280. Further, revisions to BC Hydro's Transmission service to FortisBC Inc.

under RS 3808 are approved, which include a new Tranche 1 energy price to align with the applicable RS 1830 energy charge, and the demand charge is set equal to the RS 1830 demand charge.

BC Hydro is directed to monitor load growth after the transition period and examine the impact of the change in rate structure on Transmission service class load and potential implications for rate repricing, and to report this to the BCUC by March 31, 2030.

#### 1.0 Introduction

#### 1.1 The Application

On March 16, 2023, British Columbia Hydro and Power Authority (BC Hydro) filed with the British Columbia Utilities Commission (BCUC), pursuant to sections 58 to 61 of the *Utilities Commission Act* (UCA), the Transmission Service Rate (TSR) Design Application (Application).<sup>1</sup> The Application includes a proposal for a revenue neutral, flat rate design as the default rate for Transmission service customers. The proposed new rate incorporates feedback from customers and stakeholders and improves alignment with BC Hydro's cost of service and levelized marginal cost of energy.<sup>2</sup> BC Hydro proposes to replace its existing Rate Schedule (RS) 1823 (Stepped Rate) and RS 1827 (Rate for Exempt Customers) to a new, flat rate structure (RS 1830 or Proposed Flat Rate) with a lower flat energy charge and a higher demand charge to be phased in over a three-year period.<sup>3</sup>

#### 1.2 Background

RS 1823 – Transmission Service – Stepped Rate (Stepped Rate) is BC Hydro's default rate for Transmission service for customers receiving firm electricity service at Transmission voltage. It was implemented on April 1, 2006, as a result of a negotiated settlement that was approved by Order G-79-05. The Stepped Rate consists of a two-tier rate energy charge and a demand charge.<sup>4</sup> There are approximately 150 customer sites currently taking service under this rate.<sup>5</sup> RS 1823 (Stepped Rate) is BC Hydro's default rate for Transmission service. It consists of a flat demand charge (price based on energy consumed at a given point in time), as well as a flat (RS 1823A) or tiered (RS 1823B) energy charges (price paid per kilowatt hour (kWh) of energy consumed). Under RS 1823, an energy consumption baseline (i.e. a Customer Baseline Load or CBL) is set for each customer site, or set of aggregated sites, and customers pay tiered energy charges for consumption. New customers or customers without an approved CBL pay the flat energy charge until a CBL is determined.<sup>6</sup>

RS 1827 – Rate for Exempt Customers, effective since April 2006, applies to customers exempted from RS 1823 who do not have direct control over electricity end use. There are currently four exempt Transmission service customers that take service under RS 1827: The University of British Columbia, Simon Fraser University, YVR Airport and the City of New Westminster.<sup>7</sup>

By Order G-5-17 with accompanying decision on the BC Hydro 2015 Rate Design Application, the BCUC approved the current TSR pricing principles whereby general rate increases, effective April 1, 2017, would be applied uniformly to Tier 1 and Tier 2 rates for RS 1823 Energy Charge B. The current TSR pricing principles were

<sup>&</sup>lt;sup>1</sup> Exhibit B-4, BCUC IR 1.7.1.

<sup>&</sup>lt;sup>2</sup> Exhibit B-1, Cover Letter, p. 1, Exhibit B-5, BCSEA IR 1.9.1: For example, BC Hydro's 10-year levelized marginal cost of energy refers to the present value of BC Hydro's annual marginal costs of energy (\$ per MWh) over 10 years divided by the present value of the energy (1 MWh per year) over the same 10 years.

<sup>&</sup>lt;sup>3</sup> Exhibit B-1, Cover Letter, p. 1.

<sup>&</sup>lt;sup>4</sup> Exhibit B-1, p. 2-13.

<sup>&</sup>lt;sup>5</sup> Exhibit B-1, p. 2-3.

<sup>&</sup>lt;sup>6</sup> Exhibit B-1, pp. 2-4 to 2-5.

<sup>&</sup>lt;sup>7</sup> Exhibit B-1, p. 2-6, Appendix E-1, p. 40.

extended by Orders G-93-19 and G-131-21 to March 31, 2023, or until a new rate structure for RS 1823 customers is approved by the BCUC.<sup>8</sup>

In the Application, BC Hydro proposes a new default flat rate for Transmission service customers, RS 1830, that offers a lower flat energy charge and a higher flat demand charge relative to the existing RS 1823. The proposed new rate consists of a flat energy charge of \$44.14 per megawatt hour (MWh)<sup>9</sup> and a demand charge of \$11.00 per kilovolt ampere (kVA) in fiscal 2024 dollars.<sup>10</sup>

BC Hydro proposes a transition to the Proposed Flat Rate that provides for gradual implementation over three years, as well as flexibility to allow customers with Customer-funded demand-side management (DSM) projects with remaining duration the option to stay on the Stepped Rate for two more years (Proposed Transition). BC Hydro's Proposed Transition aims to balance numerous factors, including limiting annual maximum bill increases, mitigating impacts to customers with remaining duration of Customer-funded DSM projects, and minimizing impacts to other ratepayers.<sup>11</sup>

# 1.3 Approvals Sought

BC Hydro seeks the following BCUC approvals pursuant to sections 58 to 61 of the UCA with respect to its default Transmission service rates:<sup>12</sup>

- Approval of RS 1830 for fiscal 2025, effective the later of April 1, 2024 or the date of the BCUC order, and for fiscal 2026 and 2027, effective as of April 1, 2025 and April 1, 2026, respectively, as adjusted to reflect the cumulative impact of any general rate changes approved by the BCUC between the date of the Application and the effective date of the said schedule;
- Approval to close RS 1823 to new customers, effective the later of April 1, 2024 or the date of the BCUC order;
- Approval of amendments to RS 1823 to allow customers with remaining Customer-funded DSM project duration as of April 1, 2024 to remain on the rate until the end of the fiscal 2026 Billing Year<sup>13</sup> and to transition RS 1823 and RS 1827 customers to RS 1830 and subsequently cancel RS 1827, effective the later of April 1, 2024 or the first day of the fourth calendar month following the date of the BCUC order; and
- Cancellation of RS 1823, effective at the end of the fiscal 2026 Billing Year.

BC Hydro also seeks the following BCUC approvals with respect to other rate schedules that are linked to RS 1823, as outlined in the figure below:<sup>14</sup>

<sup>&</sup>lt;sup>8</sup> Exhibit B-1, p. 2-17, Appendix A, p. 2; BC Hydro 2015 Rate Design Application Order G-5-17 dated January 20, 2017, and accompanying decision (BC Hydro 2015 RDA Decision), Directive 9.

<sup>&</sup>lt;sup>9</sup> Exhibit B-10, AMPC IR 2.1.1: The proposed energy charge was updated to \$44.39 per MWh based on the revised forecast energy and demand sales and revenue target in the BC Hydro Fiscal 2023 to Fiscal 2025 Revenue Requirements Application.

<sup>&</sup>lt;sup>10</sup> Exhibit B-1, pp. 4-3 to 4-4.

<sup>&</sup>lt;sup>11</sup> Exhibit B-1, pp. 4-26 to 4-29.

<sup>&</sup>lt;sup>12</sup> Exhibit B-1, pp. 1-6 to 1-7, Appendix A, Exhibit B-4, BCUC IR 1.7.1.

<sup>&</sup>lt;sup>13</sup> Exhibit B-1, Appendix A, p. 2: Billing Year is defined as the 12-month period starting with the first day of the customer's billing period which commences nearest to April 1 in a year and ending on the last day of such 12-month period.

<sup>&</sup>lt;sup>14</sup> Exhibit B-1, pp. 1-7 to 1-9, Appendix A.



#### Figure 1: Overview of Transmission RS Linked to RS 1823:15

- Approval of amendments to RS 1280 (Shore Power Service (Distribution)<sup>16</sup>), RS 1880, RS 1891 and RS 1892, effective the later of April 1, 2024 or the date of the BCUC order; and
- Cancellation of RS 1825 and RS 1852, effective the later of April 1, 2024 or the first day of the fourth calendar month following the BCUC order.

# 1.4 Regulatory Process and Participants

The BCUC established a public hearing process and a regulatory timetable for the review of the Application.<sup>17</sup> The regulatory process included intervener registration, two rounds of BCUC and intervener information requests (IRs), submissions on further process, letters of comment, and final and reply arguments.<sup>18</sup>

BC Hydro requires a minimum of three months to implement the Proposed Flat Rate, and therefore seeks a final BCUC decision on the Application by January 1, 2024, to allow for an effective date of April 1, 2024.<sup>19</sup> The BCUC committed to rendering its decision on the Application no later than December 29, 2023, to allow for this timely implementation of final approved rates.<sup>20</sup>

Fourteen interveners registered in this proceeding and the following interveners actively participated:

• Association of Major Power Customers (AMPC);

<sup>&</sup>lt;sup>15</sup> Exhibit B-1, Appendix E-1, p. 36.

<sup>&</sup>lt;sup>16</sup> Exhibit B-1, p. 1-8: The RS 1280 energy charge is equal to the RS 1823 Tier 2 energy charge adjusted for average distribution losses of 3.44 percent.

<sup>&</sup>lt;sup>17</sup> BCUC Order G-77-23.

<sup>&</sup>lt;sup>18</sup> BCUC Orders G-77-23, G-165-23, G-205-23, G-277-23, and G-312-23.

<sup>&</sup>lt;sup>19</sup> Exhibit B-1, p. 4-53; Exhibit B-5, AMPC IR 1.1.2.

<sup>&</sup>lt;sup>20</sup> BCUC Order G-277-23, Appendix B, p. 6.

- British Columbia Old Age Pensioners' Organization et al. (BCOAPO);
- BC Sustainable Energy Association (BCSEA);
- Canadian Association of Petroleum Producers (CAPP);
- Commercial Energy Consumers Association of BC (the CEC);
- FortisBC Energy Inc. and FortisBC Inc. (collectively, FortisBC);
- Movement of United Professionals (MoveUP); and
- Mining Association of BC (MABC).

Five letters of comment were filed by BC Hydro customers in this proceeding, specifically by Chemtrade Logistics Inc. (Chemtrade),<sup>21</sup> Paper Excellence,<sup>22</sup> Mount Milligan Mine (Mount Milligan),<sup>23</sup> Canadian Forest Products Ltd. (Canfor),<sup>24</sup> and West Fraser Mills Ltd. (West Fraser).<sup>25</sup> One of these customers is in the pulp and paper sector, one in the chemicals sector, one in the mining sector and two in the forestry sector. Mount Milligan supports the Proposed Flat Rate because, among other things, it is easier to understand as compared to the Stepped Rate.<sup>26</sup> However, the four other letters of comment express concern about the Proposed Flat Rate and anticipated bill impacts.<sup>27</sup> This decision will address specific issues raised in these letters of comment in the sections below.

#### 1.5 Legislative Framework

Sections 58 to 61 of the UCA pertain to the setting and amendment of rates. Pursuant to sections 60(1)(a) and (b) of the UCA, when setting rates, the BCUC must take into account all matters that it considers proper and relevant affecting the rate, and, amongst other things, must have due regard to setting a rate that is not unjust and unreasonable and not unduly discriminatory or unduly preferential. Section 60(1)(b.1) states that the BCUC may use any mechanism, formula or other method of setting the rate that it considers advisable and may order that the rate derived from such a mechanism, formula or other method is to remain in effect for a specified period.

The Panel conducts its review of the Application based on this legislative authority.

# 1.6 Decision Framework

The remaining contents of this decision are organized into three main sections:

- Section 2.0 addresses the rationale for BC Hydro's proposed TSR design and general issues arising regarding BC Hydro's proposals;
- Section 3.0 addresses BC Hydro's approvals sought associated with the Proposed Flat Rate, Proposed Transition, and the optional Transmission service rates;

<sup>&</sup>lt;sup>21</sup> Exhibit D-1.

<sup>&</sup>lt;sup>22</sup> Exhibit D-2.

<sup>&</sup>lt;sup>23</sup> Exhibit D-3.

<sup>&</sup>lt;sup>24</sup> Exhibit D-4.

<sup>&</sup>lt;sup>25</sup> Exhibit D-5.

<sup>&</sup>lt;sup>26</sup> Exhibit D-3.

<sup>&</sup>lt;sup>27</sup> Exhibit D-1, D-2, D-4, and D-5.

- Section 4.0 addresses BC Hydro's requests related to RS 3808 Transmission Service FortisBC. Inc (FBC);
- Section 5.0 addresses BC Hydro's proposal to monitor and report to the BCUC on impacts of the Proposed Flat Rate; and
- Section 6.0 addresses BC Hydro's confidentiality requests made during this proceeding and the Panel's determination in this regard.

#### 2.0 Rationale for BC Hydro's Proposed Transmission Service Rate Design and Issues Arising

The following sections 2.1 to 2.8 review the rationale for BC Hydro's proposed TSR design and discuss issues regarding the objectives, alignment with ratemaking principles, ratepayer impacts, including customers with Customer-funded DSM projects and the Proposed Transition, among other matters. Panel discussion of the issues raised in the following sections is provided in Sections 3.1 to 3.2 in relation to BC Hydro's approvals sought.

#### 2.1 History of Transmission Rate Design

BC Hydro serves approximately 200 customers at Transmission voltage through 13 rate schedules. RS 1823 (Stepped rate) is the default Transmission service rate, with around 150 customer sites in fiscal 2022. There are four customers exempt from the stepped rate (RS 1827), four customers with biomass energy production (RS 1828), and FBC, which takes service under RS 3808. Additionally, approximately 25 to 35 customer sites receive non-firm service for part of their electricity needs through the optional rates RS 1880, RS 1892, and RS 1893.<sup>28</sup> RS 1880 (Standby and Maintenance Supply) is available to customers when there are curtailments to the customers' self-generation capacity.<sup>29</sup> RS 1892 (Freshet Energy or Freshet Rate) encourages additional energy consumption during the May to July freshet period,<sup>30</sup> while RS 1893 (Incremental Energy Rate) is currently a pilot until March 31, 2024, encouraging additional energy usage all year round.<sup>31</sup> There are currently no customers for RS 1825 (Time-of-Use Rate),<sup>32</sup> RS 1852 (Modified Demand),<sup>33</sup> RS 1894/RS 1895 (Clean B.C. Electrification Rates).<sup>34</sup>

The Stepped Rate (RS 1823) was implemented on April 1, 2006, through BCUC Order G-79-05, in response to the provincial government's 2002 policy outlining the need for energy conservation through a two-tiered stepped rate to reduce the potential for future dependency on volatile electricity imports and better manage the environmental impacts of energy generation.<sup>35</sup> In response to the recommendations of the BCUC resulting from the 2002 policy, the provincial government and the Lieutenant Governor in Council established guidelines for the design of RS 1823:<sup>36</sup>

<sup>&</sup>lt;sup>28</sup> Exhibit B-1, Section 2.2, p. 2-3.

<sup>&</sup>lt;sup>29</sup> Exhibit B-1, Section 5.2.1, p. 5-2.

<sup>&</sup>lt;sup>30</sup> Exhibit B-1, Section 5.3.1, p. 5-7.

<sup>&</sup>lt;sup>31</sup> Exhibit B-1, Section 5.3.2, p. 5-8.

<sup>&</sup>lt;sup>32</sup> Exhibit B-1, Section 5.4.1, p. 5-15.

<sup>&</sup>lt;sup>33</sup> Exhibit B-1, Section 5.4.2, p. 5-15.

<sup>&</sup>lt;sup>34</sup> Exhibit B-1, Section 5.5.2, p. 5-18 to 5-19.

<sup>&</sup>lt;sup>35</sup> Exhibit B-1, Section 2.3.2, p. 2-13.

<sup>&</sup>lt;sup>36</sup> Exhibit B-1, Section 2.3.1, Table 2–5, p. 2-11.

- The Tier 2 rate should reflect the cost of new supply and encourage energy saving and conservation;
- The quantity of power sold to Transmission service customers at Tier 1 of RS 1823 should be set at 90 percent, and the Tier 2 quantity should make up the remaining 10 percent; and
- The Tier 1 rate should be derived from the Tier 2 rate and the Tier 1/Tier 2 90/10 split to achieve revenue neutrality to the extent reasonably possible.

In 2009, the BCUC released its *Report to the Government on the British Columbia Hydro and Power Authority Transmission Service Rate Program* supporting the Transmission Service Program.<sup>37</sup> In 2013, a government review concluded that the RS 1823 functioned as intended.<sup>38</sup>

Somewhat unique to the Stepped Rate is the need to periodically seek approval of the Tier 1 and Tier 2 relative price levels; this approval is obtained by applying to the BCUC.<sup>39</sup> For each customer site (or set of aggregated sites), a CBL is established based on normal historical annual consumption. A lower charge (Step 1) is in effect up to 90 percent of the CBL, and a higher charge (Step 2) is applied to any consumption above 90 percent. The CBL is reset annually and approved by the BCUC.<sup>40</sup>





Since its inception in 2006, the RS 1823 charge for Step 1 and Step 2 has been adjusted several times.<sup>42</sup>

# 2.2 Objectives of Proposed Rate Design

BC Hydro seeks to replace the existing Stepped Rate with the Proposed Flat Rate over a three-year transition period, with all customers paying the Proposed Flat Rate starting in the third year (i.e. fiscal 2027).<sup>43</sup> The proposal is aligned with BC Hydro's fiscal 2020 Fully Allocated Cost of Service Study, the 2021 Integrated

<sup>&</sup>lt;sup>37</sup> Exhibit B-1, Section 2.3.3, p. 2-14.

<sup>&</sup>lt;sup>38</sup> Exhibit B-1, Section 2.3.4, p. 2-14.

<sup>&</sup>lt;sup>39</sup> Exhibit B-1, Section 2.3.6, p. 2-16.

<sup>&</sup>lt;sup>40</sup> Exhibit B-1, Section 1.2, p. 1-5.

<sup>&</sup>lt;sup>41</sup> Exhibit B-1, Figure 2-1, p. 2-9.

<sup>&</sup>lt;sup>42</sup> Exhibit B-1, Section 2.3.6, Figure 2-2, p. 2-18.

<sup>&</sup>lt;sup>43</sup> Exhibit B-1, Section 1.5, p. 1-10, Section 4.7, p. 4-28.

Resource Plan (IRP), customer preferences, and comes after the provincial government's comprehensive review of BC Hydro and the following recommendations released in July 2021:<sup>44</sup>

To support electrification, BC Hydro should consider moving to a flat energy charge for industrial customers instead of the current two-tier rate. [...]

A flattened rate will help reduce the disincentive to grow or electrify more of industrial customers' operations.<sup>45</sup>

BC Hydro identifies the following four rate design objectives, which it states are advanced by its proposals in the Application: <sup>46</sup>

- Economic Efficiency: rate design should reflect BC Hydro's marginal costs;
- **Decarbonization**: rate design should support greenhouse gas reductions through electrification;
- **Flexibility**: rate designs should incorporate the ability to respond to the economic and political environment; and
- Affordability: rate design should mitigate customer bill impacts.

BC Hydro states that the Proposed Flat Rate aligns with government policy objectives and improves economic efficiency, flexibility, and customer understanding.<sup>47</sup>

# Positions of the Parties

AMPC, BCOAPO, the CEC, MABC, BCSEA, and MoveUP generally support the objective of the proposed rate design. However, they express varying opinions on mitigating the negative impacts on specific customers due to the RS 1830 flat energy rate and higher demand charge. The CEC submits that it "recommends that the BCUC approve BC Hydro's Application, with adjustments such that the Transmission class will fully recover the revenue shortfall",<sup>48</sup> which is discussed in Section 2.7.1 below. At the same time, MABC notes "that the sooner mining customers can transition to the proposed flat rate, the sooner that rate can be used as another tool to electrify mining operations and help meet B.C.'s decarbonization targets."<sup>49</sup>

Although AMPC expresses overall support for the Proposed Flat Rate as the default Transmission service rate, it suggests keeping the existing Stepped Rate as a permanent option for customers.<sup>50</sup> In AMPC's view, keeping the existing Stepped Rate as a permanent option for customers would ensure fairness and support conservation, which aligns with the *Clean Energy Act* and BC Hydro's IRP. AMPC is particularly worried about customers with (i) Customer-funded DSM investments and (ii) lower load factors.<sup>51</sup> In response to AMPC, BC Hydro states that the

<sup>&</sup>lt;sup>44</sup> Exhibit B-1, Section 2.6, p. 2-25, Section 3.4.1, p. 3-7.

<sup>&</sup>lt;sup>45</sup> Exhibit B-1, Section 2.5.3, p. 2-25.

<sup>&</sup>lt;sup>46</sup> Exhibit B-1, Section 2.4.3, p. 2-22.

<sup>&</sup>lt;sup>47</sup> Exhibit B-1, Section 4.2.2, p. 4-9, Section 4.3, p. 4-16, Section 4.4, p. 4-17.

<sup>&</sup>lt;sup>48</sup> CEC Final Argument, p. 14.

<sup>&</sup>lt;sup>49</sup> MABC Final Argument, p. 8.

<sup>&</sup>lt;sup>50</sup> AMPC Final Argument, p. 2.

<sup>&</sup>lt;sup>51</sup> AMPC Final Argument, p. 2, Exhibit B-1, Appendix B, p. iv: Load factor is defined as the ratio of energy consumed during a given period

Proposed Flat Rate would better reflect its average embedded costs, support introducing optional rates, improve rate stability and understanding, and reduce the administrative burden.<sup>52</sup>

BC Hydro reiterates that retaining a Stepped Rate as an optional rate on a permanent basis would result in significant revenue shortfalls, to which there has been strong opposition from non-industrial customers.<sup>53</sup> These revenue shortfalls are discussed in more detail in Section 2.3 below.

CAPP opposes BC Hydro's proposal and argues that the Proposed Flat Rate "would perpetuate a systemic unfairness – high-load factor customers will continue to subsidize other ratepayers." <sup>54</sup> CAPP suggests that developing an optional rate for high-load factor customers is urgent to resolve the systemic unfairness in the Transmission rates and should be addressed as part of this proceeding. <sup>55</sup> In reply, BC Hydro notes that there is no evidence to support CAPP's argument that the Proposed Flat Rate would discourage electrification in the oil and gas sector; the flat rate structure is expected to remove a barrier to electrification relative to the Stepped Rate. <sup>56</sup> Further, BC Hydro points to MABC's argument that the Proposed Flat Rate "represents a significant step towards fair apportionment" and that increasing the demand charge "to the full embedded cost of demand would undermine the criterion of rate stability and unnecessarily prejudice customers with below-average load factors."<sup>57</sup>

BC Hydro submits that its proposal strikes an appropriate balance between "lowering the energy charge and raising the demand charge to better reflect cost causation" and mitigating customer bill impacts.<sup>58</sup>

# 2.3 Ratemaking Principles

BC Hydro assessed the Proposed Flat Rate in accordance with Bonbright rate design criteria.<sup>59</sup> BC Hydro submits that the energy and demand charges of the Proposed Flat Rate strike an appropriate balance across multiple rate design objectives and criteria, including fairness (i.e. cost causation), economic efficiency, affordability (i.e. mitigating bill impacts), and rate stability.<sup>60</sup> BC Hydro grouped the eight Bonbright criteria into four categories as follows:<sup>61</sup>

#### 1. Fairness: Fair apportionment of costs among customers; and Avoid undue discrimination

of time, to that which would have been consumed if the load had operated at peak 100 percent of that time. A high-load factor indicates steady usage. A low-load factor indicates the recorded demand was not present for very long.

<sup>&</sup>lt;sup>52</sup> BC Hydro Reply Argument, p. 9, Exhibit B-5, BCSEA IR 1.9.1: BC Hydro defines embedded cost of energy (or average embedded costs of energy) as the energy-related costs of the existing BC Hydro system that are allocated to each customer class through BC Hydro's fully allocated cost of service studies, expressed on a unit basis.

<sup>&</sup>lt;sup>53</sup> BC Hydro Reply Argument, pp. 9 to 11.

<sup>&</sup>lt;sup>54</sup> CAPP Final Argument, p. 6.

<sup>&</sup>lt;sup>55</sup> CAPP Final Argument, p. 7.

<sup>&</sup>lt;sup>56</sup> BC Hydro Reply Argument, p. 15.

<sup>&</sup>lt;sup>57</sup> BC Hydro Reply Argument, p. 15.

<sup>&</sup>lt;sup>58</sup> BC Hydro Reply Argument, p. 14.

<sup>&</sup>lt;sup>59</sup> Exhibit B-1, p. 4-16 to 4-17.

<sup>60</sup> Exhibit B-4, BCUC IR 1.15.3, Exhibit B-10, BCOAPO IR 2.45.1, 2.48.3.

<sup>&</sup>lt;sup>61</sup> Exhibit B-1, pp. 2-21 and 4-16.

Regarding the selection of the demand charge, BC Hydro submits that \$11.00 per kVA is reasonable since it increases demand cost recovery from 61 percent under the existing demand charge of \$8.78 per kVA to 76 percent, which improves alignment with BC Hydro's cost of service. BC Hydro considers this to balance the view of some customers that the demand charge should be more cost reflective to improve fairness in the allocation of costs within the class with the concerns of other customers regarding a higher demand charge and the bill impacts that would result.<sup>62</sup>

After selecting the \$11.00 per kVA demand charge, BC Hydro then calculates the energy charge as a residual to be revenue neutral.<sup>63</sup> BC Hydro's Proposed Flat Rate for its energy charge component is \$44.14 per MWh (updated to \$44.39 per MWh).<sup>64</sup> BC Hydro submits that this energy charge is reasonable since it better aligns with BC Hydro's energy-related costs; representing 117 percent of average embedded energy costs of \$37.82 per MWh for Transmission customers compared to 121 percent for the current Tier 1 energy charge and 271 percent for the current Tier 2 energy charge.<sup>65</sup>

BC Hydro submits that the Proposed Flat Rate better aligns with this Bonbright criteria, relative to the status quo, as it lowers the energy charge and raises the demand charge, consequently aligning these charges more closely with cost causation.<sup>66</sup>

# 2. Economic Efficiency: Price signals to encourage efficient use and discourage inefficient use

At the time the Application was filed, the proposed flat energy charge of \$44.14 per MWh was between BC Hydro's 10-year and 15-year levelized marginal cost of energy (\$41.48 per MWh and \$48.50 per MWh, respectively) in fiscal 2024 dollars. However, based on BC Hydro's updated 2021 IRP, the flat energy charge of the Proposed Flat Rate no longer lies between BC Hydro's 10-year and 15-year levelized marginal cost of energy, because these respective levelized marginal costs of energy have increased to \$76 per MWh and \$77 per MWh in fiscal 2024 dollars, respectively. Despite the increase in BC Hydro's marginal cost of energy, BC Hydro does not propose to update the proposed flat energy charge of \$44.39 per MWh. Because, in BC Hydro's view, the Proposed Flat Rate strikes an appropriate balance in lowering the energy charge and raising the demand charge to align more closely with cost causation. Further, BC Hydro notes that marginal energy costs are variable and it can be challenging to reflect such variability in a default rate while also providing stable revenue recovery. BC Hydro has heard from customers that rate stability and price certainty are important and submit that optional rates provide a better way to prioritize alignment with marginal costs as compared to default rates.<sup>67</sup>

3. **Practicality:** *Customer understanding and acceptance, practical and cost effective to implement; and Freedom from controversies as to proper interpretation* 

<sup>&</sup>lt;sup>62</sup> Exhibit B-1, p. 4-7, Exhibit B-4, BCUC IR 1.12.3.

<sup>&</sup>lt;sup>63</sup> Exhibit B-4, BCUC IR 1.10.3.1.

<sup>&</sup>lt;sup>64</sup> Exhibit B-10, AMPC IR 2.1.1: The proposed energy charge was updated to \$44.39 per MWh based on the revised forecast energy and demand sales and revenue target in the BC Hydro Fiscal 2023 to Fiscal 2025 Revenue Requirements Application.

<sup>65</sup> Exhibit B-1, pp. p. 4-4, 4-7, Exhibit B-4, BCUC IR 1.10.3 and 1.12.4.

<sup>&</sup>lt;sup>66</sup> Exhibit B-4, BCUC IR 1.6.2 and 1.15.3.

<sup>&</sup>lt;sup>67</sup> Exhibit B-4, BCUC IR 1.15.3, Exhibit B-10, AMPC IR 2.1.1: The proposed energy charge was updated to \$44.39 per MWh based on the revised forecast energy and demand sales and revenue target in the BC Hydro Fiscal 2023 to Fiscal 2025 Revenue Requirements Application.

BC Hydro acknowledges that the Stepped Rate has encouraged customers to undertake energy efficiency projects producing DSM energy savings, and it expects that the Stepped Rate would continue to produce savings if it remained in place. However, the complexity of the CBL mechanism does not align well to the Bonbright rate design criteria of practicality, customer understanding and freedom from controversies as to proper interpretation.<sup>68</sup>

BC Hydro states that there are customer acceptance issues regarding the bill impacts that arise from moving from a stepped rate to a flat rate and whether a flat rate recognizes the remaining duration of energy savings from past Customer-funded DSM projects, but that this is addressed by the Proposed Transition which helps mitigate bill impacts and provides recognition of past investments in DSM as further discussed in Sections 2.5 and 2.6 of this decision.<sup>69</sup>

#### 4. Stability: Recovery of the revenue requirement; Revenue stability; and Rate stability

BC Hydro notes that the Proposed Flat Rate is revenue neutral for the Transmission service customer class and collects the forecast revenue requirement based on the fiscal 2024 forecast revenue of \$938.5 million as shown in the table below.

Fiscal 2024	Unit Rate (\$)	Units	Revenue (\$ million)
Total Energy	44.39/MWh	14,388,020 MWh	638.6
Total Demand	11.00/kVA	27,259,301 kVA	299.9
Total			938.5

#### Table 1: Revenue Neutral Rate Determination<sup>70</sup>

Further, assuming no load impacts (i.e. that the Proposed Flat Rate would not, in and of itself, result in any changes to Transmission service class load over time), BC Hydro states that revenue is stable and only varies each year by changes in load and change in general rate increases. The rate is also stable and only changes with general rate increases.<sup>71</sup> Therefore, BC Hydro submits that the Proposed Flat Rate provides greater rate stability and predictability for customers.<sup>72</sup>

# Positions of the Parties

Most of the interveners (BCOAPO, the CEC, MABC, BCSEA, and MoveUP) agree that BC Hydro's ratemaking aligns well with the Bonbright criteria. The CEC notes that "BC Hydro has undertaken an appropriate analysis and arrived at a reasonable rate design option,"<sup>73</sup> while BCSEA submits "that the Proposed Flat Rate aligns well with the Bonbright rate design criteria."<sup>74</sup>

<sup>68</sup> Exhibit B-1, pp. 2-5 to 2-6 and 5-12 to 5-13.

<sup>&</sup>lt;sup>69</sup> Exhibit B-1, Table 4-2, p. 4-16.

<sup>&</sup>lt;sup>70</sup> Exhibit B-10, Updated Table 4-5, AMPC IR 2.1.1.

<sup>&</sup>lt;sup>71</sup> Exhibit B-1, pp. 4-5, 4-16 to 4-17, and 4-20, Exhibit B-4, BCUC IR 1.6.3.

<sup>&</sup>lt;sup>72</sup> Exhibit B-1, p. 4-10, Exhibit B-4, BCUC IR 1.15.3.

<sup>&</sup>lt;sup>73</sup> CEC Final Argument, p. 6.

<sup>&</sup>lt;sup>74</sup> BCSEA Final Argument, p. 7.

In AMPC's view, BC Hydro has applied a too narrow and rigid view of revenue neutrality that is unreasonable. BC Hydro did not consider customer response (elasticity) changes resulting from electrification and load growth.<sup>75</sup> AMPC also notes that the total present value of revenue loss to cover all DSM credits to fiscal 2032 is \$50 million. AMPC compares the potential ratepayer impacts of covering the DSM credits over eight years to BC Hydro's domestic revenue of over \$5.5 billion, which would be under 0.2 percent in fiscal 2025, a "rounding error" in AMPC's view. Finally, AMPC submits that lost revenue is "always a component of BC Hydro's approved DSM plans." <sup>76</sup> AMPC submits that as all ratepayers receive and will continue to receive value from the Stepped Rate, any revenue loss concerns to honour DSM credits should be borne by all ratepayers, or alternatively the shareholder.<sup>77</sup> AMPC supports revenue neutrality to a degree, but if the goal of rate redesign is to support electrification and growth, which will increase industrial electricity revenue, there should be some flexibility allowed in this concept to ensure individual customers are not overburdened.<sup>78</sup>

In response to AMPC, BC Hydro submits that there is a large degree of uncertainty concerning potential changes in load resulting from rate restructuring, which means it would be challenging to incorporate a reasonable estimate of such changes for ratemaking purposes. Further, while a flat rate structure is expected to remove a barrier to electrification relative to the Stepped Rate, the Proposed Flat Rate is itself not intended to encourage conservation or load growth and is designed to be neutral to external policy and economic drivers.<sup>79</sup>

Further, BC Hydro notes that allowing customers to opt into the existing Stepped Rate would result in an annual revenue shortfall of \$16 million, or a total revenue shortfall net present value (NPV) of \$198 million over 15 years, and a further net economic loss of \$60 million in NPV over 15 years, which would result in a total combined revenue shortfall of \$258 million in NPV over 15 years.<sup>80</sup> BC Hydro also notes that the annual revenue loss of \$16 million resulting from AMPC's proposal to maintain the existing Stepped Rate on an optional basis is not tied to any benefit from DSM. BC Hydro argues that AMPC's proposal does not have an overall economic justification given the total combined revenue shortfall that would result.<sup>81</sup> BC Hydro submits that allowing for a modified Stepped Rate in which the Tier 2 energy charge equals the long-run marginal cost would result in an annual revenue shortfall of \$8.7 million, or a total revenue shortfall of \$107 million in NPV over 15 years. Based on the updated reference prices, BC Hydro notes that there would be a net economic gain of up to \$32 million in NPV over 15 years (since the revenue loss is less than the avoided cost of the energy and demand savings, which would result in a total combined revenue shortfall of \$75 million in NPV over 15 years).<sup>82</sup>

As discussed in Section 2.2 above, CAPP argues that the Proposed Flat Rate "would perpetuate a systemic unfairness – high-load factor customers will continue to subsidize other ratepayers." <sup>83</sup> Further, CAPP argues that the Proposed Flat Rate will not encourage electrification in the upstream oil and gas sector because the demand charge is not set to fully recover demand costs.<sup>84</sup>

<sup>&</sup>lt;sup>75</sup> AMPC Final Argument, p. 5.

<sup>&</sup>lt;sup>76</sup> AMPC Final Argument, p. 13.

<sup>&</sup>lt;sup>77</sup> AMPC Final Argument, p. 14.

<sup>&</sup>lt;sup>78</sup> AMPC Final Argument, p. 22.

<sup>&</sup>lt;sup>79</sup> BC Hydro Reply Argument, p. 12.

<sup>&</sup>lt;sup>80</sup> BC Hydro Reply Argument, p. 11.

<sup>&</sup>lt;sup>81</sup> BC Hydro Reply Argument, p. 13.

<sup>&</sup>lt;sup>82</sup> BC Hydro Reply Argument, p. 11, Exhibit B-5, BCSEA IR 1.9.1: BC Hydro defines its long-run marginal cost of energy as the cost of the next cheapest group (or block) of generation resources to be considered during system deficit in the energy load resource balance.

<sup>&</sup>lt;sup>83</sup> CAPP Final Argument, p. 6.

<sup>&</sup>lt;sup>84</sup> CAPP Final Argument, pp. 1, 4.

BC Hydro notes in its response to CAPP that a fully cost-based demand charge and revenue neutral energy charge was considered. Still, BC Hydro did not select this alternative because it had the most extensive range of bill impacts due to the effects of the higher demand charge on low-load factor customers. BC Hydro balanced lowering the energy charge and raising the demand charge to better reflect cost causation while mitigating customer bill impacts.

BC Hydro submits that there are already customer acceptance concerns from low-load factor customers resulting from the Proposed Flat Rate's demand charge of \$11.00 per kVA as evidenced by letters of comment and AMPC's final argument. BC Hydro expects a higher demand charge to increase these concerns.<sup>85</sup>

BC Hydro submits there is no evidence to support CAPP's argument that the Proposed Flat Rate will not encourage electrification in the upstream oil and gas sector because the demand charge is not set to fully recover demand costs.<sup>86</sup> On the contrary, the flat rate structure is expected to remove a barrier to electrification relative to the Stepped Rate, and a lower and flat energy charge will make it easier for customers to electrify their operations further.<sup>87</sup>

# 2.4 Consultation

BC Hydro undertook an 18-month consultation process to better comprehend the perspectives of customers and stakeholders on its default Transmission service rates and alternative rate designs. This process involved four workshops, one customer working group meeting, and one executive roundtable.<sup>88</sup>

Throughout the consultation process, BC Hydro received feedback from a diverse group of customers and stakeholders. This included industry associations representing various industrial sectors, customers with different electricity consumption patterns, including varying load factors, and customers who have participated in DSM projects to varying extents. Feedback was also received from customers who would be affected differently by potential rate design changes, new and prospective customers and intervener groups and associations representing the interests of non-industrial customers and other interested parties.<sup>89</sup>

The table below provides a summary of BC Hydro's various consultation efforts:<sup>90</sup>

<sup>&</sup>lt;sup>85</sup> BC Hydro Reply Argument, pp. 14 to 15.

<sup>&</sup>lt;sup>86</sup> BC Hydro Reply Argument, p. 15.

<sup>&</sup>lt;sup>87</sup> BC Hydro Reply Argument, p. 15.

<sup>&</sup>lt;sup>88</sup> Exhibit B-1, p. 2.

<sup>&</sup>lt;sup>89</sup> Exhibit B-4, BCUC IR 1.8.2.

<sup>90</sup> Exhibit B-1, Table 3-1, p. 3-6.

Activity	Timing	Number of Participants	Number of Feedback Forms Received	Topics
Workshop No. 1 (Refer to Appendix E-1 and E-2)	February 2021	97	29	<ul> <li>Overview of the drivers of Transmission rate redesign</li> <li>Three revenue neutral flat rate options for feedback</li> </ul>
Workshop No. 2 (Refer to Appendix E-3)	April 2021	81	27	<ul> <li>Jurisdictional review</li> <li>Four rate design concepts, including a declining block rate and modified stepped rate</li> </ul>
Workshop No. 3 (Refer to Appendix E-4)	October 2021	90	30	<ul> <li>Potential for load growth in transitioning to a flat rate</li> <li>Two non-revenue neutral flat rate options</li> </ul>
Customer Working Group Meetings (Refer to section 2.3 of Appendix E-5)	April to June 2022	10-15	n/a	<ul> <li>Transition and bill mitigation options to recognize customer investments in DSM</li> <li>Implications for broader portfolio of programs and rates</li> </ul>
Workshop No. 4 (Refer to Appendix E-6)	October 2022	59	19	<ul> <li>Proposed Flat Rate</li> <li>Transition options</li> <li>Optional Time-of-Use rate</li> </ul>

Additionally, BC Hydro held an executive roundtable meeting on February 16, 2022, with staff representing the Electricity and Alternative Energy branch of the Ministry of Energy, Mines and Low Carbon Innovation, as well as industry representation comprised of executives from AMPC, CAPP, and MABC. BC Hydro staff also held various customer-specific meetings and discussions over the last two years which helped to inform the Application.<sup>91</sup> Customers from all Transmission service rate schedules that are impacted by the Application were represented during BC Hydro's consultation process.<sup>92</sup>

<sup>&</sup>lt;sup>91</sup> Exhibit B-4, BCUC IR 1.9.1.

<sup>&</sup>lt;sup>92</sup> Exhibit B-4, BCUC IR 1.8.2.

During the consultation process on TSR design, customers and stakeholders raised various considerations including fairness, bill impacts and recognition of past energy efficiency/conservation investments. BC Hydro gathered and incorporated a broad spectrum of feedback received from all consultation efforts and then considered the different trade-offs that could be made to arrive at a balanced position.<sup>93</sup> Recognition of past Customer-funded DSM investments was a key issue raised during consultation. Many customers felt strongly that past Customer-funded DSM investments with remaining duration should continue to be recognized in some way in the event that BC Hydro were to transition away from the Stepped Rate.<sup>94</sup> Workshop materials and feedback forms were posted on BC Hydro's website for all customers to access. Materials from the customer working group meetings were shared with participants and were made available to other parties upon request. Some of the materials for the customer working group meetings were provided by customer associations to help generate ideas or to provide context for requests to BC Hydro to conduct further modelling work.<sup>95</sup> BC Hydro staff also reached out to customers that did not attend the workshops through phone calls and email correspondence to direct them to the material posted online and to encourage the submission of feedback forms.<sup>96</sup>

# Positions of the Parties

AMPC submits that BC Hydro has spent a lot of time consulting with AMPC and others, but has not meaningfully addressed harmed customers such as those in the chemical, wood manufacturing and pulp and paper industries. AMPC submits that BC Hydro's only accommodation is a slowed introduction of a two-year stepped transition<sup>97</sup> and that "[c]ustomers with negative financial impacts from switching to a flat rate are going to naturally have less financial ability to invest in emission reduction, as they will overnight need to pay more to sustain their existing operations."<sup>98</sup>

BCOAPO, the CEC, BCSEA, and MoveUp generally agree that BC Hydro conducted extensive consultation with customers and other stakeholders about proposed changes to the Transmission Service Stepped Rate. For example, BCOAPO notes that BC Hydro's development of the Proposed Flat Rate involved extensive consultation with its large industrial customers, and that the proposed demand charge is based on feedback from customers that a higher demand charge would have unacceptable bill impacts for low-load factor customers.<sup>99</sup>

#### 2.5 Customer-Funded DSM

The Stepped Rate encouraged energy efficiency and conversation from TSR customers that provides them an incentive to invest in Customer-funded DSM projects. The Tier 2 energy charge provides the financial incentives by way of bill savings for customers to proceed with operational changes and invest in energy efficiency and self generation projects. Tariff Supplement 74 (TS 74) – CBL Determination Guidelines determine the customer's CBL, which is the basis for calculating the amount of a customer's energy priced at the Tier 1 and Tier 2 energy changes.<sup>100</sup>

<sup>93</sup> Exhibit B-1, Section 3.4, pp. 3-6 to 3-7, Exhibit B-4, BCUC IR 1.8.1.

<sup>&</sup>lt;sup>94</sup> Exhibit B-1, Section 3.4.6, p. 3-20.

<sup>&</sup>lt;sup>95</sup> Exhibit B-4, BCUC IR 1.9.3.1.

<sup>&</sup>lt;sup>96</sup> Exhibit B-4, BCUC IR 1.9.4.

<sup>&</sup>lt;sup>97</sup> AMPC Final Argument, p. 24.

<sup>98</sup> AMPC Final Argument, p. 14.

<sup>&</sup>lt;sup>99</sup> BCOAPO Final Argument, p. 18.

<sup>&</sup>lt;sup>100</sup> Exhibit B-1, pp. 2-5 to 2-6 and p. 3-20.

Recognition of past Customer-funded DSM investments was a key issue raised in BC Hydro's customer and stakeholder consultation process. Based on fiscal 2022 reported data, of the total number of individual customer sites that received service on RS 1823 at the end of fiscal 2022, 34 of those sites had one or more existing Customer-funded DSM projects with remaining duration as of March 31, 2022. The last Customer-funded DSM project is scheduled to end in fiscal 2032.<sup>101</sup>

BC Hydro submits that many customers felt strongly that past Customer-funded DSM investments with remaining duration should continue to be recognized in some way if BC Hydro transitions away from the Stepped Rate.<sup>102</sup> For instance, a TSR customer who upgraded equipment to minimize the purchase of Tier 2 power and has self-funded DSM until 2030, submitted that the proposed flat rate does not meet the fairness criterion. The customer invested to help reduce energy consumption but will be forced to pay more under BC Hydro's proposed flat rate.<sup>103</sup> Customers submit that BC Hydro should offer the option of staying on the existing Stepped Rate.<sup>104</sup>

BC Hydro explored the concept of a "DSM credit" to customers based on the remaining energy savings attributed to Customer-funded DSM projects valued at \$22.64 per MWh.<sup>105</sup> BC Hydro did not proceed with the DSM credit concept further, as it was expected to result in a revenue shortfall of \$23 million in NPV that would need to be recovered either by all ratepayers or Transmission service class customers.<sup>106</sup> In a later workshop, BC Hydro further explored the issue and offered the following two options:<sup>107</sup>

**Option 1: Revenue Neutral Segmented Flat Rates** 

• RS 1823, RS 1827 and RS 3808 customers would be grouped based on their forecasted share of Tier 1 energy and assigned one of three different revenue neutral flat rates in fiscal 2025 that would each transition to the Proposed Flat Rate over five years. All customers would pay the Proposed Flat Rate by fiscal 2029. This option is revenue neutral over the transition period.

**Option 2: Staggered Implementation** 

RS 1823 customers with Customer-funded DSM projects with remaining duration would be provided the
option to stay on the existing Stepped Rate until fiscal 2027 (two additional years), while all other RS
1823 customers would transition to the Proposed Flat Rate in fiscal 2025. Other default rate schedules
with pricing linked to RS 1823 (i.e. RS 1827 and RS 3808 Tranche 1 energy and demand) would transition
to the Proposed Flat Rate in fiscal 2027. Over the three-year transition period, this option is estimated to
have a temporary revenue shortfall of approximately \$10 million in NPV.

<sup>&</sup>lt;sup>101</sup> Exhibit B-4, BCUC IR 1.18.3; Exhibit B-10, BCOAPO IR 2.72.2.

<sup>&</sup>lt;sup>102</sup> Exhibit B-1, pp. 3-6 and 3-20.

<sup>&</sup>lt;sup>103</sup> Exhibit D-1.

<sup>&</sup>lt;sup>104</sup> Exhibit D-1, D-2, and D-5.

<sup>&</sup>lt;sup>105</sup> Exhibit B-1, p. 3-22.

<sup>&</sup>lt;sup>106</sup> Exhibit B-1, Appendix E-5, p. 43, Exhibit B-5, MoveUP IR 1.2.1.

<sup>&</sup>lt;sup>107</sup> Exhibit B-1, p. 4-27.

Based on the feedback received, BC Hydro in the Application proposes the following hybrid approach (Proposed Transition):<sup>108</sup>

- RS 1823 customers without Customer-funded DSM projects with remaining duration, as well as customers taking service on RS 1827, will pay segmented flat transition rates (Segmented Rates) like Option 1. The transition period is reduced from five years to three years to align with the timing of Option 2. This reduced transition period is to address the preference of some customers for sooner implementation of the Proposed Flat Rate.
- Customers with Customer-funded DSM projects with remaining duration can choose to stay on the existing Stepped Rate for two more years (fiscal 2025 and fiscal 2026) as in Option 2, or pay the Segmented Rates.
- All customers pay the Proposed Flat Rate starting in fiscal 2027 (i.e. April 1, 2026).

BC Hydro submits that only customer sites with remaining Customer-funded DSM project duration as of April 1, 2024, will be eligible to remain on RS 1823 during the transition. Therefore, any customer sites with Customer-funded DSM projects that will have the assigned duration end by or prior to March 31, 2024, will not be eligible to stay on the Stepped Rate. This lowers the number of customer sites with remaining duration from Customer-funded DSM projects from 34 individual customer sites to 22 individual customer sites. BC Hydro further clarifies that after accounting for aggregated CBLs, there are 17 customer accounts eligible to remain on the Stepped Rate during the transition based on fiscal 2022 reported data.<sup>109</sup> Customers must elect to remain on the Stepped Rate by notifying BC Hydro in writing within 30 days of BC Hydro's notification, or else they will be moved to take service under the Proposed Flat Rate and may not transfer back to the Stepped Rate.<sup>110</sup> BC Hydro selected a 30-day notification period because it is consistent with other notice periods for Transmission service customers and provides customers with rate certainty sooner compared to a longer notification period.<sup>111</sup>

BC Hydro indicates that the Proposed Transition will mitigate average annual bill impacts, reduce the time to transition to the Proposed Flat Rate, and reduce the expected revenue shortfall from eligible customers electing to stay on the Stepped Rate during the transition to \$6.14 million in NPV over the transition period relative to Option 2 above. BC Hydro estimates the total revenue shortfall of the Proposed Transition, inclusive of providing customer choice of fiscal 2022 or fiscal 2020 for segmentation, to be \$10.53 million as shown in the table below.<sup>112</sup> BC Hydro proposes to allow customers a choice of fiscal 2020 or fiscal 2022 actual consumption as the basis for segmentation in response to customer feedback for flexibility and to support customer acceptance.<sup>113</sup> This is further discussed in Section 2.6 of this decision.

# Table 3: Estimated Revenue Shortfall under Proposed Transition<sup>114</sup>

<sup>&</sup>lt;sup>108</sup> Exhibit B-1, pp. 4-27 to 4-28.

<sup>&</sup>lt;sup>109</sup> Exhibit B-4, BCUC IR 1.18.3; Exhibit B-10, BCOAPO IR 2.72.2.

<sup>&</sup>lt;sup>110</sup> Exhibit B-1, pp. 4-55 to 4-56.

<sup>&</sup>lt;sup>111</sup> Exhibit B-4, BCUC IR 1.17.1.

<sup>&</sup>lt;sup>112</sup> Exhibit B-1, pp. 4-28, Exhibit B-1-2, pp. 4-39 to 4-40, Exhibit B-4, Corrected Table 4-12, BCUC IR 1.19.1.

<sup>&</sup>lt;sup>113</sup> Exhibit B-1, p. 4-35.

<sup>&</sup>lt;sup>114</sup> Exhibit B-4, Corrected Table 4-12, BCUC IR 1.19.1.

Revenue Shortfall (\$ millions)	From Customers Electing to Stay on the Stepped Rate During the Transition	From Customer Choice of Fiscal 2022 or Fiscal 2020 for Segmentation⁵	Total Estimated Revenue Shortfall
Fiscal 2024	-	-	-
Fiscal 2025	(1.51)	(3.04)	(4.56)
Fiscal 2026	(4.95)	(1.52)	(6.47)
NPV (Fiscal 2024 dollars)	(6.14)	(4.39)	(10.53)

BC Hydro states that if customers with remaining Customer-funded DSM were able to stay on the Stepped Rate for the duration of their Customer-funded DSM projects, BC Hydro estimates that the total value of the bill savings for these customers relative to immediate implementation of the Proposed Flat Rate would be approximately \$28.8 million in NPV.<sup>115</sup>

After accounting for the benefit provided to customers through the Segmented Rates or delayed implementation, the total bill impact resulting from the rate change for these customers is reduced to \$15.5 million. The Proposed Transition reduces the impact of the rate change for customers with remaining Customer-funded DSM by an estimated \$13.3 million in NPV.<sup>116</sup>

As for extending the transition period to fiscal 2030 or fiscal 2032 to reflect the end of the DSM project with the longest remaining duration, BC Hydro indicated that such extension would result in a higher revenue shortfall but greater bill savings for customers with remaining duration from Customer-funded DSM projects. BC Hydro calculated that allowing customers with Customer-funded DSM projects to stay on the existing Stepped Rate for the full expected duration to fiscal 2032 will result in an expected revenue shortfall of \$50 million in NPV based on fiscal 2020 data. Using fiscal 2022 reported data on Customer-funded DSM projects with remaining duration, BC Hydro estimates a revenue shortfall of approximately \$40 million in NPV.<sup>117</sup>

In their letters of comment, Chemtrade and West Fraser propose that the full remaining duration of Customerfunded DSM projects be recognized.<sup>118</sup> Further, Chemtrade states that "the most efficient customers are being forced to pay significantly more so BC Hydro can offer lower rates to attract new loads".<sup>119</sup> Similarly, West Fraser states that the proposed rate structure will impact established industries with an inflated cost of energy, which ultimately subsidizes new and growing loads who would otherwise be charged a higher portion of Tier 2 energy costs under the current rate structure.<sup>120</sup>

# Positions of the Parties

BC Hydro recognizes that some customers with longer remaining duration, such as Chemtrade and West Fraser, may be worse off from the change in rate structure; however, BC Hydro also notes that customers who made

<sup>&</sup>lt;sup>115</sup> Exhibit B-1-2, p. 4-40.

<sup>&</sup>lt;sup>116</sup> Exhibit B-1-2, p. 4-40; Exhibit B-4, BCUC IR 1.18.1.

<sup>&</sup>lt;sup>117</sup> Exhibit B-1, Appendix E-5, p. 43; Exhibit B-4, BCUC IR 1.18.2; Exhibit B-5, AMPC IR 1.7.1.

<sup>&</sup>lt;sup>118</sup> Exhibit D-1 and Exhibit D-5.

<sup>&</sup>lt;sup>119</sup> Exhibit D-1, p. 2.

<sup>&</sup>lt;sup>120</sup> Exhibit D-5, p. 2.

DSM investments accepted some level of upside and downside risk when they made their initial investment, because the Stepped Rate is a rate schedule that has always been subject to change over time (i.e. it is not a contract or a guaranteed capital incentive).<sup>121</sup>

BC Hydro disagrees with the suggestions in the letters of comment of Chemtrade and West Fraser that, under the Proposed Flat Rate, existing customers that have invested in DSM projects are subsidizing new customer load. BC Hydro explains that it proposes a flat rate structure in general and the Proposed Flat Rate in particular, for several reasons, including to improve fairness within the class by improving alignment with BC Hydro's embedded costs relative to the status quo. By raising the demand charge, the Proposed Flat Rate improves the existing cross-subsidization within the Transmission class from high-load factor customers to low-load factor customers.<sup>122</sup>

BCSEA and BCOAPO generally agree with BC Hydro's proposed treatment for customers with remaining duration of Customer-funded DSM projects. BCSEA agrees with BC Hydro's efforts to mitigate impacts to these customers and BCOAPO submits that the reduction in the savings is reasonable since the current Tier 2 rate well exceeds BC Hydro's long-run marginal cost of energy and repricing of the Tier 2 rate would be required if the Stepped Rate design were to continue to be the basis for the default TSR.<sup>123</sup>

However, AMPC, MABC, and CAPP submit that customers with remaining Customer-funded DSM duration should be recognized for the full duration.

AMPC finds BC Hydro's proposal unacceptable regarding Customer-funded DSM, as it is a fairness and customer confidence issue. Customers made capital investment decisions based on a certain set of economic assumptions regarding bill savings.<sup>124</sup> AMPC states, "... customers made decisions in good faith to respond to government policy and BC Hydro rate signals promoting conservation. To remain fair, as well as protect long-term stability and competitive energy pricing, customers who invested in conservation should not now have to subsidize other industrial customers' growth."<sup>125</sup>

MABC supports BC Hydro's investment in DSM initiatives and recognizes that DSM initiatives form an important pillar of BC Hydro's IRP.<sup>126</sup> MABC believes that it is appropriate to compensate Transmission service customers who have remaining savings under the rules set out in the Tariff Supplement.<sup>127</sup> In MABC's view, any DSM investments made by Transmission service customers during the past ten years were made with the expectation that the measures would attract a predictable economic benefit under a stable regulatory regime. Removing that benefit through regulatory amendments before the benefit has fully materialized undermines several Bonbright criteria.<sup>128</sup>

CAPP submits that the full remaining duration of Customer-funded DSM projects should be recognized.<sup>129</sup>

<sup>&</sup>lt;sup>121</sup> BC Hydro Final Argument, p. 26, Exhibit B-1, Appendix G, p. 12.

<sup>&</sup>lt;sup>122</sup> BC Hydro Final Argument, p. 27.

<sup>&</sup>lt;sup>123</sup> BCSEA Final Argument, p. 9; BCOAPO Final Argument, p. 28.

<sup>&</sup>lt;sup>124</sup> AMPC Final Argument, p. 11.

<sup>&</sup>lt;sup>125</sup> AMPC Final Argument, p. 11.

<sup>&</sup>lt;sup>126</sup> MABC Final Argument, p. 11.

<sup>&</sup>lt;sup>127</sup> MABC Final Argument, p. 13.

<sup>&</sup>lt;sup>128</sup> MABC Final Argument, p. 14.

<sup>&</sup>lt;sup>129</sup> CAPP Final Argument, p. 9.

In reply to submissions regarding Customer-funded DSM with remaining duration, BC Hydro reiterates that its Proposed Transition provides reasonable compensation to customers with remaining Customer-funded DSM project duration. Providing customers a choice of staying on the Stepped Rate for two additional years appropriately balances "the perspective of customers that expect the current Tier 2 bill savings to continue for the full remaining duration of their Customer-funded DSM projects, and the perspective that the current Tier 2 energy charge offers bill savings that exceed the value of these energy savings."<sup>130</sup> Customers made DSM investments knowing that the Stepped Rate can change over time.<sup>131</sup>

If the BCUC decides that customers should be compensated for the value of remaining DSM duration, BC Hydro submits that a DSM credit that applies to the customer's bill each month may be a practical and simple approach, to be included as a special condition of RS 1830. DSM credit cost recovery can be done using the existing load variance account or through general rate increases.<sup>132</sup>

The CEC raises concerns about how any revenue shortfall should be treated in relation to Customer-funded DSM. The CEC does not agree with BC Hydro's logic that because the Customer-funded DSM projects have benefited all ratepayers by deferring the need for new energy supply, that all customers should absorb the revenue shortfall.<sup>133</sup>

However, MABC considers with BC Hydro's acknowledgment that the utility's customers as a whole received a benefit from the Customer-funded DSM, it is just and reasonable for those customers to share an equal burden of the downside of those investments.<sup>134</sup>

This issue is further discussed in Section 2.7.1 below regarding the recovery of the revenue shortfall.

# 2.6 Transition to Fiscal 2027

Further to the transition options explored in BC Hydro's workshops and the Proposed Transition as outlined in Section 2.5 of this decision, this section addresses details of the Proposed Transition, including the proposed Segmented Rates. As noted previously, the Proposed Transition involves RS 1823 customers without Customerfunded DSM projects with remaining duration, as well as customers taking service on RS 1827, paying segmented flat transition rates (Segmented Rates).<sup>135</sup>

To estimate the Segmented Rates for the Proposed Transition, BC Hydro groups RS 1823, RS 1827 and RS 3808 customers into three segments based on their forecast Tier 1 energy consumption expressed as a share of their total energy consumption, as follows:<sup>136</sup>

• Segment 1 or Energy Charge A: For customers with a high share of Tier 1 energy;

<sup>&</sup>lt;sup>130</sup> BC Hydro Reply Argument, p. 7.

<sup>&</sup>lt;sup>131</sup> BC Hydro Reply Argument, p. 7.

<sup>&</sup>lt;sup>132</sup> BC Hydro Reply Argument, p. 8.

<sup>&</sup>lt;sup>133</sup> CEC Final Argument, p. 11.

<sup>&</sup>lt;sup>134</sup> MABC Final Argument, p. 14.

<sup>&</sup>lt;sup>135</sup> Exhibit B-1, pp. 4-27 to 4-28.

<sup>&</sup>lt;sup>136</sup> Exhibit B-1, pp. 4-29 to 4-30, Exhibit B-4, BCUC IR 1.11.5: BC Hydro confirmed that "Segment 1", "Segment 2" and "Segment 3" shown in Table 4-11 of the Application correspond respectively to "Energy Charge A", "Energy Charge B" and "Energy Charge C" in the Rate Schedules attached to the Application in Appendix D-3 (for Fiscal 2025) and Appendix D-4 (for Fiscal 2026).

- Segment 2 or Energy Charge B: For customers with a moderate share of Tier 1 energy; and
- Segment 3 or Energy Charge C: For customers with a low share of Tier 1 energy, including customers previously taking service under Energy Charge A under RS 1823 and RS 1827, and new customers.

BC Hydro notes that segmenting customers so they each pay different flat rates during the transition allows for the mitigation of bill impacts while minimizing the difference in the rates paid by different customers over time.<sup>137</sup> BC Hydro states that each segment will be charged a different flat energy charge that reflects the average energy charges those customers currently pay due to the rate structures in place.<sup>138</sup>

BC Hydro provides the following table showing the Segmented Rates for its Proposed Transition for fiscal 2025, fiscal 2026 and fiscal 2027 in fiscal 2024 dollars and escalated by the general rate increases:<sup>139</sup> **Table 4: Segmented Rates for Proposed Transition** 

Year	Forecast General Rate	Energy Charge (\$/MWh)					Demand Charge (\$/kVA)		
	Increase (%)	Segr	nent 1	Segr	nent 2	Segr	nent 3	All Se	gments
	(%)	F2024 Dollars	With General Rate Increase	F2024 Dollars	With General Rate Increase	F2024 Dollars	With General Rate Increase	F2024 Dollars	With General Rate Increase
F2025	6.42	44.98	47.87	47.69	50.75	50.25	53.48	9.54	10.15
F2026	4.89	44.68	49.87	46.04	51.39	47.32	52.82	10.27	11.46
F2027	0.11	44.39	49.60	44.39	49.60	44.39	49.60	11.00	12.29

With respect to the table above, BC Hydro explains that the energy charges for each segment in fiscal 2024 dollars are escalated by the cumulative general rate increase for each segment. Moreover, all segments pay the same demand charge in each year, which is also escalated by the cumulative general rate increase as shown in the last column. BC Hydro notes that this approach assumes that the customer load in each segment remains constant over the transition period based on the fiscal 2024 forecast. Any revenue variance due to variation in forecast segment load during the transition period will be captured in the existing Load Forecast Variance Deferral Account. Prior to the fiscal 2027 implementation of the Proposed Flat Rate, BC Hydro plans to examine whether the Proposed Flat Rate (escalated by general rate increases) collects the forecast target revenue based on the fiscal 2027 load forecast and, if necessary, reprice the rate so that it is revenue neutral on a forecast basis.<sup>140</sup>

BC Hydro originally intended for the Segmented Rates to be revenue neutral so that there would be no revenue shortfall absorbed by other ratepayers. However, after considering customer and stakeholder feedback, BC Hydro developed the Proposed Transition that allows customers to select between fiscal 2020 or fiscal 2022 for segmentation purposes, which is expected to result in a revenue shortfall of \$4.39 million in NPV over two years as shown in Table 3 in Section 2.5 above.<sup>141</sup> The Proposed Transition also provides approximately half the compensation to customers with remaining Customer-funded DSM projects. BC Hydro submits that this midpoint value appropriately balances the perspective of customers that expect the current Tier 2 bill savings to

<sup>&</sup>lt;sup>137</sup> Exhibit B-4, BCUC IR 1.11.1.

<sup>&</sup>lt;sup>138</sup> Exhibit B-4, BCUC IR 1.11.4.

<sup>&</sup>lt;sup>139</sup> Exhibit B-10, Updated Table 4-11, AMPC IR 2.1.1.

<sup>&</sup>lt;sup>140</sup> Exhibit B-1, pp. 4-35 to 4-36.

<sup>&</sup>lt;sup>141</sup> Exhibit B-10, BCOAPO IR 2.77.1, CEC IR 2.43.3.

continue for the full remaining duration of their Customer-funded DSM projects, and the perspective that the current Tier 2 energy charge offers an incentive that exceeds the value of these energy savings.<sup>142</sup> Although, BC Hydro aims for revenue neutrality on a forecast basis each year when designing its default rates, it acknowledges the revenue shortfalls under its Proposed Transition to provide bill mitigation to customers, including those with remaining duration from Customer-funded DSM projects. As shown in Table 3 in Section 2.5 above, the expected revenue shortfall from customers electing to stay on the Stepped Rate during the transition is \$6.14 million in NPV over two years. <sup>143</sup> The recovery of the revenue shortfalls under the Proposed Transition is discussed in Section 2.7.1 below.

Regarding the proposed three-year transition period, Canfor and West Fraser each submitted letters of comment that recommend a longer implementation period as a potential mitigation measure.<sup>144</sup>

#### Positions of the Parties

In response to Canfor and West Fraser's recommendation for a longer implementation period, BC Hydro submits that one of the two transition options that it considered had a transition period of five years (Option 1). However, given there was not a clear preference among stakeholders for either of the two options presented, BC Hydro's Proposed Transition has a three-year transition period to balance the desire of some customers to have a more immediate implementation of the Proposed Flat Rate.<sup>145</sup>

AMPC submits that under its proposal to set the Proposed Flat Rate (RS 1830) as the default rate and making the RS 1823 Stepped Rate available permanently (see Section 2.2 above), there's no need for BC Hydro's proposed three-year rate transition.<sup>146</sup>

MABC prefers an optional immediate transition to the new flat rate, but MABC reluctantly supports the proposed three-year transition period as a required trade-off to meet the Bonbright criterion of rate stability and avoid rate shock for low-load factor customers.<sup>147</sup> MABC submits that to minimize the ongoing subsidization of low-load factor customers by high-load factor customers, the BCUC should not extend the transition period unless such an extension is optional and the added cost of any customers choosing to remain on the Stepped Rate during that period is recovered from all customer classes.<sup>148</sup>

CAPP submits that Option 1 regarding segmented flat rates would be beneficial to operators who have invested in DSM programs, as it helps them better manage the bill impacts. CAPP considers Option 2 regarding staggered implementation is less favourable since it is unclear how this option would be applied by customer or by site/facility. CAPP submits that BC Hydro should elaborate on the details so customers can assess the impacts of this option.<sup>149</sup>

<sup>&</sup>lt;sup>142</sup> Exhibit B-1, Appendix G, p. 15.

<sup>&</sup>lt;sup>143</sup> Exhibit B-4, BCUC IR 1.3.1 and 1.19.1.

<sup>&</sup>lt;sup>144</sup> Exhibit D-4 and Exhibit D-5.

<sup>&</sup>lt;sup>145</sup> BC Hydro Final Argument, p. 26, Exhibit B-1, pp. 4-27 to 4-28.

<sup>&</sup>lt;sup>146</sup> AMPC Final Argument, p. 2.

<sup>&</sup>lt;sup>147</sup> MABC Final Argument, p. 18.

<sup>&</sup>lt;sup>148</sup> MABC Final Argument, pp. 19 to 20.

<sup>&</sup>lt;sup>149</sup> CAPP Final Argument, p. 9.

The CEC, BCOAPO, BCSEA and MoveUp have no objection to the transition portion of BC Hydro's Application. For example, the CEC submits that BC Hydro has made considerable efforts to minimize the negative impacts to Transmission customers, which is evident by the Proposed Transition.<sup>150</sup>

BCOAPO and CEC's submissions on the recovery of the revenue shortfall are discussed in Section 2.7.1 below.

#### 2.7 Transmission Service Ratepayer Impacts

BC Hydro notes that the majority of Transmission service customers by revenue (83 percent) would have a bill impact of under +/- 5 percent based on the Proposed Flat Rate relative to the Stepped Rate which both include the fiscal 2024 general rate increase, thus these bill impacts only reflect the impact of the rate design change.<sup>151</sup> Figure 3 below shows the distribution of bill impacts resulting from the Proposed Flat Rate as compared to the Stepped Rate by total revenue using fiscal 2024 forecast consumption:<sup>152</sup>



#### Figure 3: Bill Impact Distribution of Proposed Flat Rate by Total Revenue

In relation to the above figure, BC Hydro explains that 30 customer sites, which account for 46 percent of total Transmission service rate class revenue, will experience bill increases of greater than 0 percent and less than 4 percent. Seventeen customer sites, which account for 10 percent of total Transmission service rate class revenue, are expected to see bill increases greater than 4 percent. Sixty-eight customer sites, which account for 44 percent of total Transmission rate class revenue, will experience bill decreases (i.e. generally customers that consume higher shares of Tier 2 energy).<sup>153</sup>

Figure 4 below shows the bill impact distribution of the Proposed Flat Rate as compared to the Stepped Rate by number of sites, using fiscal 2024 forecast consumption. Sites that have aggregated CBLs under TS 74 are included on an aggregated site basis. As shown below, the annual bill impacts (assuming immediate implementation of the Proposed Flat Rate) range from approximately -8 percent to 11 percent.<sup>154</sup>

<sup>&</sup>lt;sup>150</sup> CEC Final Argument, p. 9.

<sup>&</sup>lt;sup>151</sup> Exhibit B-1, p. 4-9, Exhibit B-4, BCUC IR 1.14.1.

<sup>&</sup>lt;sup>152</sup> Exhibit B-1, Figure 4-4, pp. 4-25 to 4-26.

<sup>&</sup>lt;sup>153</sup> Exhibit B-1, pp. 4-24 to 4-25, Exhibit B-4, BCUC IR 1.11.3.

<sup>&</sup>lt;sup>154</sup> Exhibit B-1, Figure 4-3, pp. 4-24 to 4-25.



#### Figure 4: Bill Impact Distribution of Proposed Flat Rate by Number of Sites

BC Hydro states that energy and demand charges could have been selected that more closely align with embedded costs; however, such charges would result in a larger range of bill impacts for customers. For example, alternative 3 considered in the Application would result in a 100 percent and 99 percent recovery of embedded demand and energy costs, respectively, but was not selected by BC Hydro because it has the largest range of bill impacts due to the impact of the higher demand charge on low-load factor customers.<sup>155</sup>

As shown in the tables below, BC Hydro notes that there are only three accounts with low load factor and a moderate or high share of Tier 1 energy that experience the higher bill impacts from the Proposed Flat Rate. Considering this and that the bill impacts are smaller in dollar terms relative to the moderate and high-load factor customers (i.e. based on the percentage of total revenue for the Transmission service class by load factor

<sup>&</sup>lt;sup>155</sup> Exhibit B-1, Table 4-14, pp. 4-46 to 4-47, Exhibit B-4, BCUC IR 1.15.1.

and share of Tier 1 energy), BC Hydro submitted that the bill impacts from the Proposed Flat Rate for customers with low load factors and a high share of Tier 1 energy are reasonable.<sup>156</sup>

	Share of Tier 1 Energy			
Load Factor	High Share (>97%)	Moderate Share (93% to 97%)	Low Share (<93%)	
Low Load Factor (10 to 40%)	9.3%	8.0%	2.6%	
Moderate Load Factor (40 to 70%)	4.7%	1.4%	-2.8%	
High Load Factor (70 to 100%)	3.1%	-1.8%	-5.4%	

Table 5: Average Bill Impact by Load Factor and Share of Tier 1 Energy<sup>157</sup>

#### Table 6: Number of Accounts by Load Factor and Share of Tier 1 Energy<sup>158</sup>

	Share of Tier 1 Energy			
Load Factor	High Share (>97%)	Moderate Share (93% to 97%)	Low Share (<93%)	
Low Load Factor (10 to 40%)	2	1	11	
Moderate Load Factor (40 to 70%)	15	5	44	
High Load Factor (70 to 100%)	10	6	20	

Under the Proposed Transition using forecast fiscal 2024 consumption and inclusive of the net general rate increases and Deferral Account Rate Rider impacts, BC Hydro notes that most accounts have bill impacts between -4 percent to 4 percent in fiscal 2025 and fiscal 2027 as shown in Figure 5 below. In fiscal 2026, there are more accounts with bill increases above 4 percent because of the higher net general rate increase in that year. Further, inclusive of the net general rate increases and Deferral Account Rate Rider impacts, the combined maximum annual bill impact in each year is 6.5 percent in fiscal 2025, 9.4 percent in fiscal 2026 and 6.2 percent in fiscal 2027. These are for different sites in each year and the primary reason for the relative increase is that each of these sites has a lower load factor.<sup>159</sup>

# Figure 5: Bill Impact Distribution of Proposed Transition by Number of Sites including General Rate Increases and Deferral Account Rate Rider<sup>160</sup>

<sup>&</sup>lt;sup>156</sup> Exhibit B-4, BCUC IR 1.15.1.

<sup>&</sup>lt;sup>157</sup> Exhibit B-4, BCUC IR 1.15.1: This table shows the average bill impact based on fiscal 2024 forecast data of moving immediately from the Stepped Rate to the Proposed Flat Rate by load factor and share of Tier 1 energy.

<sup>&</sup>lt;sup>158</sup> Exhibit B-4, BCUC IR 1.15.1: This table shows the number of accounts (defined as individual customer sites that are billed on an individual basis, or sets of aggregated sites that are billed on an aggregate basis in accordance with TS 74) by load factor and share of Tier 1 energy.

<sup>&</sup>lt;sup>159</sup> Exhibit B-1, pp. 4-37 to 4-38, Exhibit B-4, BCUC IR 1.14.1. The net general rate increase and Deferral Account Rate Rider impacts assumed by BC Hydro are 2.7% in fiscal 2025, 5.4% in fiscal 2026 and -0.4% in fiscal 2027 as noted on pages 4-37 to 4-38 of the Application.

<sup>&</sup>lt;sup>160</sup> Exhibit B-1-2, Figure 4-6, p. 4-38(i).



With respect to potential load impacts of moving from the Stepped Rate to the Proposed Flat Rate, AMPC suggested during consultation that BC Hydro should consider the benefits of load growth and ensure that these benefits are retained within the class. BC Hydro states that this would require a regulatory mechanism specifically for the Transmission service rate class, such as a load variance account.<sup>161</sup> Four letters of comment express concerns about the anticipated bill impacts from the Proposed Flat Rate.<sup>162</sup> The letters of comment also suggest different options to avoid or further mitigate bill impacts. For instance, Chemtrade, Paper Excellence and West Fraser state that the existing Stepped Rate should be optional for customers indefinitely.<sup>163</sup>

# 2.7.1 Impacts of the Proposed Transition on Other Ratepayers

As shown in Table 3 in Section 2.5 above, BC Hydro's Proposed Transition results in a total revenue shortfall of \$10.53 million in NPV over two years (i.e. \$6.14 million from customers electing to stay on the Stepped Rate during the transition and \$4.39 million from customers' choice of fiscal year for segmentation).<sup>164</sup>

Regarding the revenue shortfall resulting from the customer choice of fiscal year for segmentation, BC Hydro proposes that the revenue shortfall be absorbed by all ratepayers, because it represents an upper bound of the potential magnitude of the revenue shortfall (i.e. as BC Hydro assumed that customers will make the bill minimizing decision), it is small relative to BC Hydro's total domestic revenue in fiscal 2025 of \$5,571.9 million, and would be simpler to collect from all ratepayers.<sup>165</sup> However, BC Hydro does not object to the revenue shortfall being absorbed by ratepayers within the Transmission service class only, and provides an alternative approach for consideration which would reprice the Segmented Rates by an increase of 0.5 percent to recover the revenue shortfall from the customers that would benefit from the choice.<sup>166</sup>

<sup>&</sup>lt;sup>161</sup> Exhibit B-1, p. 4-22.

<sup>&</sup>lt;sup>162</sup> Exhibit D-1, D-2, D-4, and D-5.

<sup>&</sup>lt;sup>163</sup> Exhibit D-1, p. 2, Exhibit D-2, and Exhibit D-5, p. 2.

<sup>&</sup>lt;sup>164</sup> Exhibit B-4, Corrected Table 4-12, BCUC IR 1.19.1.

<sup>&</sup>lt;sup>165</sup> Exhibit B-4, BCUC IR 1.19.1, Exhibit B-8, BCUC IR 2.36.2, Exhibit B-10, BCOAPO 2.77.1 and CEC IR 2.43.3.

<sup>&</sup>lt;sup>166</sup> Exhibit B-4, BCUC IR 1.19.1.

With respect to the revenue shortfall under the Proposed Transition from customers with Customer-funded DSM projects with remaining duration electing to stay on the Stepped Rate for two more years; BC Hydro noted that these revenue shortfalls are temporary in nature and submitted that they are appropriate to be recovered by all ratepayers because these Customer-funded DSM projects have not only benefited Transmission service ratepayers, but also benefited all ratepayers by deferring the need for new energy supply.<sup>167</sup>

# Positions of the Parties

BC Hydro submits that the letters of comment are consistent with the feedback from BC Hydro's consultation for the TSR Application in that they show differences in customer perspectives.<sup>168</sup>

In response to the concerns raised in the letters of comment regarding the anticipated bill impacts from the Proposed Flat Rate, BC Hydro reiterates that it proposes an \$11.00 per kVA demand charge to strike a balance between reflecting its cost of service and mitigating bill impacts. BC Hydro also notes that it proposes transition measures to help address bill impacts (the Proposed Transition is discussed in Section 2.6 above). Further, BC Hydro submits that its planned future exploration of an optional time-of-use rate or load curtailment programs may provide opportunities for customers to achieve bill savings while also providing benefits to other ratepayers.<sup>169</sup>

As discussed previously, BC Hydro does not support the proposal for the Stepped Rate to be available for Transmission customers as an optional rate indefinitely, because it asserts that doing so would result in a total revenue shortfall of \$258 million in NPV over 15 years. BC Hydro views this alternative as unfair because there is no economic justification to recover the significant revenue shortfall from all ratepayers.<sup>170</sup>

BC Hydro also submits that any alternative will be evaluated differently among customers, and that no alternative will meet the needs and preferences of all customers.<sup>171</sup>

BCSEA agrees with BC Hydro's view that the Proposed Flat Rate "has a narrow range of bill impacts for customers relative to some of the alternatives considered."<sup>172</sup>

AMPC is concerned about the proposed RS 1830 demand charge. AMPC provides the following table, which references a previous BC Hydro fully allocated cost of service study:<sup>173</sup>

	F2016 forecast (NSA)	F2020 (	Ex. E	B-1,	F2022
		Appendix C	C)		
Demand	38%	42%			40%
Energy	62%	58%			60%

# **Composition of Transmission Class Embedded Costs**

<sup>&</sup>lt;sup>167</sup> Exhibit B-4, BCUC IR 1.3.1 and 1.19.1.

<sup>&</sup>lt;sup>168</sup> BC Hydro Final Argument, p. 24.

<sup>&</sup>lt;sup>169</sup> BC Hydro Final Argument, pp. 24 to 25.

<sup>&</sup>lt;sup>170</sup> BC Hydro Final Argument, p. 25.

<sup>&</sup>lt;sup>171</sup> BC Hydro Final Argument, pp. 27–28.

<sup>&</sup>lt;sup>172</sup> BCSEA Final Argument, p. 9.

<sup>&</sup>lt;sup>173</sup> AMPC Final Argument, Appendix A, p. 28.

AMPC argues that BC Hydro's assertion that demand costs were making up more of the embedded cost to serve Transmission customers is "lightly supported". AMPC questions BC Hydro's proposal to increase the demand charge by approximately 25 percent, from \$8.78 to \$11 per kVA.<sup>174</sup>

AMPC submits that low-load factor customers are most impacted by BC Hydro's proposal. However, AMPC notes that lower load factor Transmission customers tend to peak at times of the month that are not the highest peak times for the system. This means that their individual peaks are not a key driving factor in the costly system peaks.<sup>175</sup>

Regarding AMPC's suggestion for BC Hydro to establish a deferral account to ensure any benefits of load growth are retained within the Transmission service class, BCOAPO agrees with BC Hydro that it would be difficult to discern the net benefits (i.e. incremental revenues less incremental costs) associated with a change (increase) in large industrial load. Further, BCOAPO notes that net benefits are only expected for a short period (fiscal 2026 to 2028), and it is not typical for benefits from potential load growth from rate design to be kept within the class.<sup>176</sup>

CAPP submits that the revenue shortfall during the transition should not be absorbed by the high-load factor transmission customers and that the customer classes that are being subsidized should not be excluded from the burden of the revenue shortfall.<sup>177</sup> In reply, BC Hydro notes that there is no evidence on the record regarding CAPP's proposal to only recover the revenue shortfall from non-high-load factor Transmission service customers. In BC Hydro's view, there is no basis for allocating the costs of transition measures to only certain customers within a class, depending on their load factor. Therefore, BC Hydro submits that CAPP's proposal should be dismissed.<sup>178</sup>

BCOAPO agrees with BC Hydro's proposal that the additional revenue shortfall arising from allowing customers with remaining Customer-funded DSM who elect to stay on the Stepped Rate for two more years should be recovered from all customers. BCOAPO accepts BC Hydro's rationale that customer-funded DSM projects have benefited all ratepayers by deferring the need for new energy supply and that its proposal appropriately recognizes this.<sup>179</sup> However, BCOAPO submits that the revenue shortfall attributable to the segmentation of customers and gradual implantation of the Proposed Flat Rate should not be recovered from all customers, but rather recovered from the Transmission service customers through repricing the segmented rates. BCOAPO's understanding is that a 0.6 percent increase in fiscal 2025 followed by a 0.3 percent increase in fiscal 2026 more closely matches the revenue shortfall and submits that this is the repricing approach that the BCUC should approve.<sup>180</sup>

The CEC recommends that the BCUC approve BC Hydro's Application, with adjustments to fully recover the revenue shortfall from the Transmission rate class, rather than the expected shortfall being borne by all ratepayers.<sup>181</sup> The CEC disagrees with BC Hydro's rationale that because the customer-funded DSM projects

<sup>&</sup>lt;sup>174</sup> AMPC Final Argument, Appendix A, p. 28.

<sup>&</sup>lt;sup>175</sup> AMPC Final Argument, Appendix A, p. 29.

<sup>&</sup>lt;sup>176</sup> BCOAPO Final Argument, p. 12.

<sup>&</sup>lt;sup>177</sup> CAPP Final Argument, p. 8.

<sup>&</sup>lt;sup>178</sup> BC Hydro Reply Argument, p. 16.

<sup>&</sup>lt;sup>179</sup> BCOAPO Final Argument, p. 27.

<sup>&</sup>lt;sup>180</sup> BCOAPO Final Argument, pp. 24 to 26, and p. 34, Exhibit B-10, BCOAPO 2.73.1.

<sup>&</sup>lt;sup>181</sup> CEC Final Argument, pp. 1, 14.

have benefited all ratepayers by deferring the need for new energy supply, that all customers should absorb the revenue shortfall. In the CEC's view, all customers have already 'paid' for the general benefits resulting from DSM projects as DSM costs are borne by all customer groups; and even on a temporary basis, other rate classes should not absorb these costs, particularly rate classes such as commercial that already contribute more than their cost of service.<sup>182</sup> Further, the CEC also submits that BC Hydro's identified repricing alternative related to the segmentation choice of year should be undertaken, and that the Transmission rate class should also recover the remaining shortfall either through rate repricing, or through collection in a deferral account to be amortized as needed to minimize the impacts.<sup>183</sup>

In reply to arguments regarding the recovery of the revenue shortfalls, BC Hydro explains that the CEC refers to evidence in its argument that relates to BC Hydro's DSM program expenditures, rather than customer expenditures on Customer-funded DSM projects, which the Proposed Transition is intended to address. BC Hydro submits that the costs associated with Customer-funded DSM projects incented by the Stepped Rate were not funded through a BC Hydro capital incentive, but rather were Customer-funded. Therefore, BC Hydro maintains its position that recovering the revenue shortfall arising from allowing only those customers with Customer-funded DSM projects with remaining duration to stay on the Stepped Rate for two additional years from all ratepayers is appropriate. BC Hydro reiterates that these Customer-funded DSM projects have not only benefited Transmission service ratepayers but also all other ratepayers by deferring the need for new energy supply.<sup>184</sup>

BC Hydro does not object to the alternative approach of recovering the revenue shortfall from customers' choice of year for Segmentation from the Transmission service class only through repricing the Segmented Rates.<sup>185</sup>

#### 2.8 Optional Rates

Optional rates are non-revenue neutral rates under which customers can voluntarily choose to receive service. The proposed changes to the Stepped Rate will impact the optional Transmission service rates, as these are linked to the existing Stepped Rate energy charge.<sup>186</sup> The table below presents an overview of the optional rate schedules and the proposed changes.<sup>187</sup>

Rate Schedule	Proposed Changes
RS 1880: Standby and Maintenance Supply	Amend
RS 1891: Shore Power Service	Amend
RS 1280: Shore Power Service	Amend
RS 1892: Freshet Energy	Amend
RS 1893: Incremental Energy Rate	No change
RS 1825: Time-of-Use Rate	Cancel

Table 7: Proposed Changes to Optional Transmission Service Rate
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<sup>&</sup>lt;sup>182</sup> CEC Final Argument, pp. 11 to 12.

<sup>&</sup>lt;sup>183</sup> CEC Final Argument, p. 13.

<sup>&</sup>lt;sup>184</sup> BC Hydro Reply Argument, p. 4.

<sup>&</sup>lt;sup>185</sup> BC Hydro Reply Argument, p. 3.

<sup>&</sup>lt;sup>186</sup> Exhibit B-1, Section 5.2. p. 5-2.

<sup>&</sup>lt;sup>187</sup> Exhibit B-1, Table 1–1, Section 1.3, p. 1-8.

RS 1852: Modified Demand	Cancel
RS 1828: Biomass Energy Program	Subject to Government of BC Direction
RS 1894/95: Clean B.C. Electrification Rates	Subject to Government of BC Direction

BC Hydro proposes to reprice the RS 1880, RS 1891 and RS 1280 energy charges to the Proposed Flat Rate energy charge.<sup>188</sup> BC Hydro considers the energy charges for these rates to be cost reflective as long as they lie above BC Hydro's embedded cost of energy and below BC Hydro's long-run marginal cost of energy.<sup>189</sup> This proposal is in line with customers' preference for stable and predictable rates.<sup>190</sup>

BC Hydro also proposes to amend the Freshet Energy RS 1892 to add RS 1830 references in the tariff's wording. Specifically, customers that have previously taken service under RS 1892 may keep their existing baselines. For customers that have not previously taken service on RS 1892, BC Hydro proposes to use RS 1823 or, if available, RS 1830 energy consumption during the most recent freshet period to determine the baselines.<sup>191</sup>

# Positions of the Parties

Few interveners made comments regarding the optional rates in their final arguments. BCSEA agrees with BC Hydro that the Proposed Flat Rate would support the introduction of optional rates to better reflect BC Hydro's marginal costs.<sup>192</sup> AMPC takes no position on BC Hydro's proposals on optional rates. AMPC accepts linking RS 1280, 1880, and 1891 energy rates with the proposed default flat energy rate. AMPC also supports BC Hydro cancelling RS 1825 and 1852, as they have not been in use for some time.<sup>193</sup>

BCOAPO submits that the energy rates for RS 1880, RS 1891 and RS 1280 should be set to better align with BC Hydro's marginal costs as originally intended. BCOAPO submits that this approach would also align with the view that optional rates should reflect the current economic environment. To achieve this outcome, but also address concerns regarding rate stability, BCOAPO submits that the fiscal 2025 energy charge for these three rate schedules could be set at the mid-point between the RS 1830 energy charges and BC Hydro's long-run marginal cost of energy (in fiscal 2025 dollars) and then be escalated annually using the approved rate increases for BC Hydro.<sup>194</sup> BCOAPO recommends that the BCUC direct BC Hydro to report back to the BCUC prior to the end of fiscal 2025 on the outcome of its anticipated discussions with customers and bring forward any resulting proposals regarding mechanisms for adjusting the baselines for optional rates. Subject to the BCUC making such a direction, BCOAPO also has no issues with BC Hydro's proposals regarding RS 1893,<sup>195</sup> RS 1825, RS 1827, RS 1828, RS 1894 and RS 1895.<sup>196</sup>

- <sup>192</sup> BCSEA Final Argument, p. 9.
- <sup>193</sup> AMPC Final Argument, pp. 25–26.
- <sup>194</sup> BCOAPO Final Argument, p. 32.
- <sup>195</sup> BCOAPO Final Argument, p. 33.
- <sup>196</sup> BCOAPO Final Argument, p. 34.

<sup>&</sup>lt;sup>188</sup> Exhibit B-1, p. 5-7.

<sup>&</sup>lt;sup>189</sup> Exhibit B-8, BCUC IR 2.42.1, Exhibit B-10, BCOAPO IR 2.80.1.

<sup>&</sup>lt;sup>190</sup> Exhibit B-8, BCUC IR 2.42.3.

<sup>&</sup>lt;sup>191</sup> Exhibit B-1, p. 5-14.

BC Hydro submits that the current proposal to tie the pricing of the RS 1880, RS 1891 and RS 1280 energy charges to the Proposed Flat Rate energy charge was informed by stakeholder engagement and feedback, which indicated a preference for a stable and predictable rate.<sup>197</sup> BC Hydro notes that BCOAPO's suggestion to set the energy charges for RS 1880, RS 1891 and RS 1280 at the mid-point between the energy charge of the Proposed Flat Rate and BC Hydro's long-run marginal cost of energy would be unsupported by consultation feedback, as this was not an alternative that was discussed.<sup>198</sup>

#### 3.0 Panel Determinations on Proposed Changes

In the following subsections, the Panel addresses the approvals sought by BC Hydro in the proceeding. Specifically, Section 3.1 addresses BC Hydro's requests associated with the Proposed Flat Rate and the Proposed Transition, including the Segmented Rates. In Section 3.2, the Panel addresses BC Hydro's requests related to the optional Transmission service rates.

The Panel also addresses BC Hydro's requests related to RS 3808 (FBC), monitoring and future reporting, and confidentiality in Sections 4.0, 5.0 and 6.0, respectively.

# 3.1 RS 1830 and Segmented Rates

The Proposed Flat Rate (RS 1830), as shown in Appendix D-3 of the Application and as adjusted to reflect the general rate changes approved by the BCUC for fiscal 2025, is approved, effective April 1, 2024. RS 1830 for fiscal 2026 and 2027, as shown in Appendix D-4 of the Application and as adjusted to reflect the cumulative impact of any general rate changes approved by the BCUC between the date of the Application and the effective date of the said schedule (i.e. for fiscal 2026 or fiscal 2027), is also approved, effective April 1, 2025 and April 1, 2026, respectively.

The Panel accepts BC Hydro's aim for revenue neutrality on a forecast basis each year when designing its default rates; but recognizes that some discretion is needed to balance customer acceptance and mitigate negative impacts to customers. BC Hydro has amended its initial flat rate design in response to customer feedback, resulting in revenue shortfalls which will be discussed later. The Panel also recognizes that any rate design change will impact each customer differently. Some customers will be better off while some will be worse off. The questions here are what degree of relief should be made available to potential negatively impacted customers and the appropriate level of relief costs for all other customers to cover. The Panel strives for a balanced approach, to determine a rate design that is just, reasonable, and not unduly discriminatory or unduly preferential. The Panel finds that the Proposed Flat Rate, including the Proposed Transition to be just, reasonable, and not unduly discriminatory or unduly preferential.

The Panel is persuaded by BC Hydro's evidence to increase the demand charge, which will improve alignment with BC Hydro's cost of service, as it increases the demand cost recovery from 61 percent to 76 percent. The Panel recognizes that the proposed increase in the demand charge will negatively impact those customers with a lower load factor, with the opposite effect on customers with higher load factors. The Panel notes that if demand charges were increased to recover an even higher proportion of the demand-related costs, the impacts on customers would be greater and would likely result in intolerable bill impacts for some customers. The Panel

<sup>&</sup>lt;sup>197</sup> BC Hydro Reply Argument, p. 5.

<sup>&</sup>lt;sup>198</sup> BC Hydro Reply Argument, p. 5.

finds the proposed demand charge to be a reasonable balance between cost recovery and mitigating customer impacts. The revenue neutral energy charge is a balancing function after setting the demand charge, and the Panel finds this approach to be reasonable. We note that BC Hydro has considered feedback from customers and stakeholders in its proposed rate design and find the consultation efforts made by BC Hydro to be appropriate.

The Panel notes that retaining a Stepped Rate as an optional rate on a permanent basis, as proposed by AMPC and in letters of comment, would result in a significant total revenue shortfall of \$258 million in NPV over 15 years. We are persuaded by BC Hydro's argument that this alternative would be unfair because there is no economic justification to recover the significant revenue shortfall from all ratepayers.

AMPC submits that customers negatively impacted from switching to the Proposed Flat Rate will "have less financial ability to invest in emission reduction, as they will overnight need to pay more to sustain their existing operations." The Panel notes that rate design is not the only mechanism to compel emission reduction, although it can help achieve this objective. Further, electricity might not be the only option to reduce greenhouse gas emissions. The Panel is not compelled by AMPC's argument that BC Hydro has not meaningfully addressed negatively impacted customers; we consider the Proposed Transition is appropriate to balance conflicting customer concerns, which is discussed later in this section.

At the time of the Application, BC Hydro's marginal cost of energy was between approximately \$42 and \$49 per MWh. However, it was later updated to between \$76 and \$77 per MWh. The Panel accepts the flat energy charge of \$44 per MWh as proposed, because this covers BC Hydro's embedded energy costs of approximately \$38 per MWh and continues to send a price signal to customers for electricity consumption. Further, the Panel agrees with BC Hydro's argument that the Proposed Flat Rate will encourage efficient use because of the higher demand charge. If the energy charge increased to \$77 per MWh, revenue neutrality could not be achieved, and the demand charge would need to be reduced significantly. The low demand charge would also not allow BC Hydro to recover demand-related costs on a fixed basis. Therefore, the Panel considers that the proposal doesn't detract from achieving the energy efficiency principle.

# **Proposed Transition**

The Panel finds BC Hydro's Proposed Transition to be a reasonable approach to balance cost recovery and mitigate bill impacts. We consider the proposed transition period to be appropriate to alleviate the impacts of the transition. We agree with MABC that the transition period should not be extended in order to minimize the ongoing subsidization of low-load factor customers by high-load factor customers. The Segmented Rates are an appropriate way to transition customers to the Proposed Flat Rate and will ease the impact for customers during the transition period. Without the transition, there would be a significant change for Transmission customers, which would not be fair. Therefore, we consider the total revenue shortfall that results from the Proposed Transition to be reasonable. The two drivers of the revenue shortfall, as well as the recovery of each element are discussed below.

# Customers with Customer-funded DSM Projects with Remaining Duration

The treatment for customers with remaining duration of Customer-funded DSM projects is one of the most contentious issues during BC Hydro's consultation process and in this proceeding. These customers invested in DSM to avoid the more expensive tier of the Stepped Rate.
BC Hydro reports that 34 sites had one or more existing Customer-funded DSM projects with remaining duration as of March 31, 2022. The last Customer-funded DSM project is scheduled to end in fiscal 2032. BC Hydro estimates that allowing customers with Customer-funded DSM projects to stay on the existing Stepped Rate until fiscal 2032 will result in a revenue shortfall of approximately \$40 to \$50 million in NPV. BC Hydro also explored giving a DSM credit that is estimated to result in a revenue shortfall of \$23 million in NPV. Ultimately, BC Hydro developed its Proposed Transition to offer these customers two additional years on the existing Stepped Rate or the option of Segmented Rates. The Proposed Transition is estimated to have a revenue shortfall of \$10.53 million, of which \$6.14 million is from customers electing to stay on the Stepped Rate during the transition. Any revenue shortfall will either be borne by all ratepayers or Transmission service class customers as discussed further below.

The Panel acknowledges that customers with remaining Customer-funded DSM duration may be negatively impacted by flattening the energy charge. However, allowing these customers to stay on the existing Stepped Rate until fiscal 2032 to make the last remaining customer whole may result in a revenue shortfall that is four to five times greater than the Proposed Transition of approximately \$10 million in NPV. The estimated revenue shortfall of offering DSM credits more than doubles the revenue shortfall of the Proposed Transition. The Panel finds that the estimated revenue shortfall to be absorbed by other customers is too high under the two alternative scenarios as compared to the Proposed Transition.

Further, the Panel finds that extending the timeline from the third year to the eighth year in fiscal 2032 to fully transition into the flat energy rate may not encourage customers to change their energy consumption behaviours in achieving BC Hydro's rate design objectives. The Panel finds that the Proposed Transition strikes a fair balance between an immediate change to the flat energy rate and delaying implementation. The gradual change over two years allows affected customers to continue bill savings and time to prepare their operations for the flat energy rate. The Proposed Transition results in a reasonable revenue shortfall to be absorbed by all ratepayers.

Therefore, the Panel accepts BC Hydro's Proposed Transition as a reasonable rate-setting mechanism for customers with Customer-funded DSM projects with remaining duration as of April 1, 2024.

Further, the Panel finds the 30-day notification period for customers that are eligible to opt in to remain on the Stepped Rate before being transferred to the Proposed Flat Rate, as discussed in Section 2.5 above, to be reasonable.

# Recovery of the Revenue Shortfall from the Proposed Transition

BC Hydro is approved to recover the revenue shortfall resulting from customers electing to stay on the Stepped Rate during the Proposed Transition from all ratepayers. The Panel is persuaded by BC Hydro's proposal to recover the revenue shortfall from customers electing to stay on the Stepped Rate from all customers. Given that these Customer-funded DSM projects have not only benefited Transmission service ratepayers, but also benefited all ratepayers by deferring the need for new energy supply, the Panel finds it is not fair to recover these costs only from Transmission service customers. With respect to AMPC's suggested alternative to shift these costs to the shareholder, we find this to be without merit. AMPC has not provided any evidence to demonstrate that these costs have not been prudently incurred. As such the Panel finds it most appropriate to recover this revenue shortfall from all ratepayers.

BC Hydro is directed to recover the revenue shortfall resulting from the customers' choice of year for segmentation from the Transmission service class only through repricing the Segmented Rates. The Panel is persuaded by BC Hydro's proposal to allow customer choice of fiscal year for the basis of segmentation in response to customer feedback. The Panel is persuaded by BCOAPO and the CEC's arguments that BC Hydro's identified repricing alternative related to the segmentation choice of year should be undertaken to recover this portion of the revenue shortfall from the Transmission service class only. We note that BC Hydro does not object to this alternative approach. Further, given that the customer choice only benefits Transmission service customers and does not benefit other ratepayers, we consider the alternative of recovering these costs from all ratepayers would be unfair.

# Other Matters Related to the Proposed Flat Rate

Regarding AMPC's suggestion for BC Hydro to establish a deferral account to ensure any benefits of load growth are retained within the Transmission service class, the Panel disagrees with AMPC. We are persuaded by BC Hydro's reasoning, which is also supported by BCOAPO, that any benefit of load growth will flow to all customers which will offset the revenue shortfall for all customers.

# 3.2 Optional Rates

The Panel, in Section 3.1 above, approves BC Hydro's proposed flat energy rate. As for the optional rate proposals, the Panel must consider whether any changes are required resulting from the default TSR changes.

The rate design for optional rates is different than the default rate since BC Hydro confirmed that revenue neutrality does not apply to the optional rates. Optional rate schedules result in incremental revenue for BC Hydro. Further, as these are interruptible service, only the energy charge is applicable. The Panel acknowledges some intervener suggestions to set BC Hydro's optional rates to better reflect BC Hydro's marginal costs. Certain optional rate schedules were previously designed based on BC Hydro's marginal cost at Tier 2 of the RS 1823 Stepped Rate. BCOAPO recommends setting the energy rates for RS 1880, RS 1891, and RS 1280 to be at the mid-point between the RS 1830 energy charges and BC Hydro's marginal costs.

However, the Panel notes that the proposed flat energy rate amount is expected to cover the embedded cost of energy. Further, the Panel views that simplicity of matching the RS 1830 flat energy rate is beneficial to customer understanding and acceptance. While the Panel understands that keeping energy rates at marginal cost is intended to send economic price signals to customers, such rate design considerations are not necessary in optional Transmission service rate design because these are non-firm service. Therefore, the Panel accepts BC Hydro's proposal to match the proposed flat energy rate of RS 1830 for RS 1880, RS 1891, and RS 1280.

As for the RS 1892 relating to the Freshet Rate, the Panel notes that BC Hydro is not proposing any rate design changes to the energy charge that was previously approved by Order G-104-20. The proposed amendments introduce RS 1830 into the RS 1892 tariff to enable the determination of baseline energy consumption as a component of the Freshet Rate. BCOAPO recommends further reporting on the mechanisms for adjusting the baselines for optional rates, with the introduction of RS 1830. However, when the BCUC approved RS 1892 on a permanent basis under Order G-104-20, BC Hydro had already been directed to file a full evaluation report of the Freshet Rate by December 31, 2024. Therefore, the Panel views that the existing BCUC direction to BC Hydro is sufficient and additional directives are unnecessary at this time.

As for BC Hydro's proposal to cancel RS 1825 and RS 1852, no interveners oppose such cancellations and these rate schedules are not used by any customers. The Panel accepts cancelling RS 1825 and RS 1852 as requested by BC Hydro.

Accordingly, the Panel makes the following determinations on BC Hydro's Application, effective April 1, 2024:

- Approval of proposed amendments to RS 1280, RS 1880, RS 1891 and RS 1892.
- Cancellation of RS 1825 and RS 1852.

# 4.0 RS 3808 Tranche 1 Energy and Demand Charge

In addition to RS 1823, BC Hydro provides firm Transmission service to customers, including (FBC, under RS 3808 and its associated Power Purchase Agreement between BC Hydro and FBC. BC Hydro reported that RS 1827 and RS 3808 generated \$105.9 million in revenue in F2022.<sup>199</sup> At the time of BC Hydro's Application, the table below shows the rate summary for RS 3808:<sup>200</sup>

Table 8: I	Rate Summary for RS 3808

RS 3808	Interim Rates Effective April 1, 2022 <sup>18</sup>
Demand Charge	\$8.696 per kVA of Billing Demand per Billing Month
Tranche 1 Energy Price <sup>19</sup>	5.096 ¢ per kWh (\$50.96 per MWh)
Tranche 2 Energy Price	9.509 ¢ per kWh (\$95.09 per MWh)

The RS 3808 includes a Tranche 1 energy price and demand charge that is tied to the RS 1827 (Rate for Exempt Customers) energy and demand charge. The maximum Tranche 1 amount specified in RS 3808 is 1,041 gigawatt hour per contract year. BC Hydro explains that the Tranche 1 energy price reflects the energy charge component of BC Hydro's rate for customers taking electricity at transmission voltages that are exempt from RS 1823 and is currently equal to the energy charge component of RS 1827. The Tranche 2 energy price is intended to reflect BC Hydro's "most recent proxy" for its long-run marginal cost for firm energy. This component of RS 3808 is intended to provide a price signal regarding the provincial cost of new electricity supply for FBC's long-term resource planning decisions.<sup>201</sup>

At the time of its Application, BC Hydro indicated that it has initiated discussions with FBC to review changes to the Power Purchase Agreement. BC Hydro will file an amended RS 3808 for BCUC approval if an agreement is reached to revise Tranche 1 energy and demand charges.<sup>202</sup>

<sup>&</sup>lt;sup>199</sup> Exhibit B-1, p. 2-4.

<sup>&</sup>lt;sup>200</sup> Exhibit B-1, Table 2–4, p. 2-7.

<sup>&</sup>lt;sup>201</sup> Exhibit B-5, BCOAPO IR 1.16.1.

<sup>&</sup>lt;sup>202</sup> Exhibit B-1, p. 4-1; Exhibit B-5, FBC IR 1.1.1.

On August 23, 2023, BC Hydro filed an update requesting approval of a revised RS 3808 (Evidentiary Update). BC Hydro submitted that it has come to an agreement with FBC regarding a replacement rate for RS 3808, which includes a new Tranche 1 energy price to align with the applicable RS 1830 energy charge previously taking service under RS 1827<sup>203</sup> and a revised RS 3808 demand charge equal to the RS 1830 demand charge.<sup>204</sup> BC Hydro provided a rate summary for RS 3808 as follows:<sup>205</sup>

RS 3808	Final Rates Effective April 1, 2023 (fiscal 2024)
Demand Charge	\$8.812 per kVA of Billing Demand per Billing Month
Tranche 1 Energy Price	5.165 ¢ per kWh (\$51.65 per MWh)
Tranche 2 Energy Price	9.509 ¢ per kWh (\$95.09 per MWh)
RS 3808	Interim Rates Effective April 1, 2024 (fiscal 2025)
Demand Charge	\$9.73 per kVA of Billing Demand per Billing Month
Tranche 1 Energy Price	5.112 ¢ per kWh (\$51.12 per MWh)
Tranche 2 Energy Price	9.509 ¢ per kWh (\$95.09 per MWh)
RS 3808	Interim Rates Effective April 1, 2025 (fiscal 2026)
Demand Charge	\$11.00 per kVA of Billing Demand per Billing Month
Tranche 1 Energy Price	5.047 ¢ per kWh (\$50.47 per MWh)
Tranche 2 Energy Price	9.509 ¢ per kWh (\$95.09 per MWh)
RS 3808	Interim Rates Effective April 1, 2026 (fiscal 2027)
Demand Charge	\$11.80 per kVA of Billing Demand per Billing Month
Tranche 1 Energy Price	4.736 ¢ per kWh (\$47.36 per MWh)
Tranche 2 Energy Price	9.509 ¢ per kWh (\$95.09 per MWh)

## Table 9: Updated Rate Summary for RS 3808

BC Hydro did not propose changing the RS 3808 Tranche 2 energy price as part of this proceeding, and as of August 2023, BC Hydro and FBC have not had discussions with respect to what would be an appropriate replacement rate for the RS 3808 Tranche 2 energy price. If RS 1823 is cancelled as proposed in the Application

<sup>&</sup>lt;sup>203</sup> Energy Charge C under F2025 and F2026.

<sup>&</sup>lt;sup>204</sup> Exhibit B-6, pp. 1 to 2.

<sup>&</sup>lt;sup>205</sup> Exhibit B-8, Updated Table 2–1, BCUC IR 2.40.1.

(i.e. at the end of fiscal 2026), BC Hydro expects that a new RS 3808 Tranche 2 energy price will need to be set, as agreed to by BC Hydro and FBC, and approved by the BCUC, at a later time.<sup>206</sup>

# Positions of the Parties

No interveners opposed BC Hydro's proposals regarding RS 3808.<sup>207</sup>

# Panel Determination

The Panel accepts BC Hydro's proposal for RS 3808 as provided in its letter dated August 23, 2023, and approves the accompanying RS 3808 tariff changes. BC Hydro and FBC reached an agreement as filed in BC Hydro's Evidentiary Update, which sets out a replacement rate for RS 3808. The revised RS 3808 includes a new Tranche 1 energy price to align with the applicable RS 1830 energy charge and the demand charge is set equal to the RS 1830 demand charge. The Panel recognizes that FBC is a registered intervener in this proceeding and has not made any submissions regarding BC Hydro's approval sought on RS 3808. The evidence by way of the letter agreement signed by BC Hydro and FBC shows that both parties are in favour of the changes to RS 3808. Further, no other interveners have expressed concerns on BC Hydro's proposal on RS 3808.

# 5.0 Monitoring and Future Reporting

In its Application, BC Hydro submits that the new rates do not account for any change in sales due to the rate change. BC Hydro explains that there is a large degree of uncertainty with respect to the potential impacts resulting from the rate change because some customers are expected to see a bill increase, while others a bill decrease. To the extent that there is load growth in the Transmission service class as a result of the removal of the tiered rate structure, BC Hydro states that this could result in benefits to ratepayers so long as the incremental revenues exceed the incremental costs of serving the new load.<sup>208</sup>

BC Hydro proposes to monitor load growth after the transition period and examine the impact of the change in rate structure on Transmission service class load and potential implications for rate repricing.<sup>209</sup> BC Hydro intends to provide a report that includes the following:<sup>210</sup>

- The number of existing and new Transmission service customers taking service on RS 1823, RS 1827 and RS 1830 and volumes of use in fiscal 2027, fiscal 2028 and fiscal 2029, relative to the fiscal 2024 sales forecast;
- Revenue generated by Transmission service customers on RS 1830 in fiscal 2027, fiscal 2028 and fiscal 2029 relative to the fiscal 2024 revenue target for RS 1823 and RS 1827, escalated to account for general rate increases;
- Assessment of the load response from existing Transmission service customers taking service on RS 1823 and RS 1827 as a result of the rate change, with consideration of other factors affecting load such as economic conditions or general rate increases;

<sup>&</sup>lt;sup>206</sup> Exhibit B-5, BCOAPO IR 1.16.1; Exhibit B-6, p. 3.

<sup>&</sup>lt;sup>207</sup> BCOAPO Final Argument, p. 34, BCSEA Final Argument, p. 11.

<sup>&</sup>lt;sup>208</sup> Exhibit B-1, p. 4-22.

<sup>&</sup>lt;sup>209</sup> Exhibit B-1, pp. 4-23, 4-56.

<sup>&</sup>lt;sup>210</sup> Exhibit B-4, BCUC IR 1.21.1.

- Comparison of the fiscal 2024 sales and revenue forecast for RS 1823 and RS 1827 with the fiscal 2030 sales and revenue forecast for RS 1830; and
- Determination of the potential need and impact of RS 1830 repricing.

BC Hydro explains that it plans to track usage within the Transmission service class over time and will compare the year-over-year deviation in consumption after implementation of the Proposed Flat Rate relative to historical trends, as well as other variables related to economic conditions. BC Hydro will also consider modifying its data or group customers where appropriate, and carry out analysis on both a per customer and aggregate basis.<sup>211</sup>

As for timing, BC Hydro proposes to monitor longer term changes in load following the implementation of the Proposed Flat Rate during fiscal 2027 through fiscal 2029 and file a report with the BCUC in fiscal 2030 outlining the findings. BC Hydro expects that the earliest pricing updates to RS 1830 would be considered following the filing of the report.<sup>212</sup>

# Positions of the Parties

BCOAPO submits that the BCUC should direct BC Hydro to undertake the necessary analysis to determine whether recovering a portion of the embedded demand-related cost through the energy charge would reduce intra-class cross subsidization and include its findings in the monitoring report planned for fiscal 2030.<sup>213</sup> Given the difference between BC Hydro's proposed default rates and its marginal energy costs, BCOAPO is concerned that the new design is encouraging incremental load that is uneconomic to serve from a system perspective. BCOAPO anticipates that BC Hydro's plan to monitor and report on the impacts of the new rate design will allow the BCUC and other parties to determine the extent to which this is a real issue going forward.<sup>214</sup>

BC Hydro understands BCOAPO's concern that there is cross subsidization from low- to high-load factor customers.<sup>215</sup> BC Hydro submits that the Proposed Flat Rate will include 24 percent of demand-related costs in the energy charge, which may mitigate any cross subsidy.<sup>216</sup> To help address BCOAPO's concern, BC Hydro proposes that it could examine, during its consultation on a voluntary time-of-use rate for industrial customers, the feasibility of offering an optional time-of-use rate with a demand charge that would be applied to billing demand defined over a period that more closely covers system peak demand. This would provide information on customer interest sooner than the fiscal 2030 report.<sup>217</sup>

# Panel Determination

The Panel is satisfied with BC Hydro's proposed monitoring of RS 1830 both in terms of the information to be included and the timing of its report. Reporting in fiscal 2030 will provide BC Hydro sufficient time to collect and analyze data after full implementation of RS 1830. Therefore, **BC Hydro is directed to monitor load growth after** 

<sup>&</sup>lt;sup>211</sup> Exhibit B-8, BCUC IR 2.39.2.

<sup>&</sup>lt;sup>212</sup> Exhibit B-1, p. 4-56; Exhibit B-4, BCUC IR 1.15.3.

<sup>&</sup>lt;sup>213</sup> BCOAPO Final Argument, p. 17.

<sup>&</sup>lt;sup>214</sup> BCOAPO Final Argument, pp. 21, 34.

<sup>&</sup>lt;sup>215</sup> BC Hydro Reply Argument, p. 5.

<sup>&</sup>lt;sup>216</sup> BC Hydro Reply Argument, p. 6.

<sup>&</sup>lt;sup>217</sup> BC Hydro Reply Argument, p. 6.

# the transition period and examine the impact of the change in rate structure on Transmission service class load and potential implications for rate repricing, and to report this to the BCUC by March 31, 2030.

With respect to BCOAPO's submissions on the analysis of determining whether recovering a portion of the embedded demand-related cost through the energy charge would reduce intra-class cross subsidization, the Panel recognizes that BC Hydro's monitoring already includes determining the potential need and impact of RS 1830 repricing. We do not see the need for more prescriptive monitoring at this time because any RS 1830 repricing should include analysis of the demand charge and energy charge. The Panel encourages BC Hydro, during its consultation regarding a voluntary time-of-use rate for industrial customers, to examine the feasibility of offering an optional time-of-use rate with a demand charge that would be applied to billing demand defined over a period that more closely covers system peak demand.

# 6.0 Confidentiality

During the proceeding, BC Hydro filed the following exhibits on a confidential basis and submitted that these documents contain customer-specific commercially sensitive information (Confidential Exhibits):

- Exhibit B-4-1, BC Hydro submitting confidential responses to BCUC IR No. 1;
- Exhibit B-5-1, BC Hydro submitting confidential responses to Intervener IR No. 1, including confidential Excel file attachments;
- Exhibit B-9, BC Hydro submitting confidential responses to BCUC IR No. 2; and
- Exhibit B-11, BC Hydro submitting confidential responses to Intervener IR No. 2, including a confidential Excel file attachment.

BC Hydro also provided public versions of the above-mentioned confidential responses, with redacted information, except for the Excel files in Exhibit B-4, Exhibit B-5, Exhibit B-8, and Exhibit B-10.

# Positions of the Parties

No interveners made submissions on BC Hydro's confidentiality requests.

# Panel Determination

The Panel accepts that the Confidential Exhibits be kept confidential due to their customer-specific commercially sensitive nature until the BCUC determines otherwise.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 15<sup>th</sup> day of December 2023.

### Original signed by:

### T. A. Loski

Panel Chair / Commissioner

Original signed by:

C. M. Brewer Commissioner

Original signed by:

A. C. Dennier Commissioner



Suite 410, 900 Howe Street Vancouver, BC Canada V6Z 2N3 bcuc.com P: 604.660.4700 TF: 1.800.663.1385 F: 604.660.1102

#### ORDER NUMBER G-353-23

IN THE MATTER OF the Utilities Commission Act, RSBC 1996, Chapter 473

and

British Columbia Hydro and Power Authority Transmission Service Rate Design Application

#### **BEFORE:**

T. A. Loski, Panel Chair C. M. Brewer, Commissioner A. C. Dennier, Commissioner

on December 15, 2023

#### ORDER

#### WHEREAS:

- A. On March 16, 2023, pursuant to sections 58 to 60 of the Utilities Commission Act, British Columbia Hydro and Power Authority (BC Hydro) filed with the British Columbia Utilities Commission (BCUC) a Transmission Service Rate Design Application (Application), which includes a proposal to transition Rate Schedule (RS) 1823 (Stepped Rate) and RS 1827 customers to a new, flat-rate structure (RS 1830 or Proposed Flat Rate) with a lower energy charge and higher demand charge over a three-year transition period;
- B. By Orders G-77-23, G-165-23, G-205-23 and G-277-23, the BCUC established the regulatory timetable for the review of the Application which included intervener registration, two rounds of information requests (IRs), submissions on further process, a deadline for letters of comment, and final and reply arguments;
- C. Fourteen interveners registered in this proceeding and the BCUC received five letters of comment;
- D. In its Application, BC Hydro seeks the following BCUC approvals:
  - i. Approval of RS 1830 for fiscal 2025, effective as of the later of April 1, 2024 or the date of the BCUC order, and for fiscals 2026 and 2027, effective as of April 1, 2025 and April 1, 2026, respectively, as adjusted to reflect the cumulative impact of any general rate changes approved by the BCUC between the date of the Application and the effective date of RS 1830;
  - ii. Approval of amendments to RS 1280, 1880, 1891 and 1892, effective the later of April 1, 2024 or the date of the BCUC order;
  - iii. Approval to close RS 1823 to new customers, effective the later of April 1, 2024 or the date of the BCUC order;

- iv. Approval of amendments to RS 1823 to allow customers with remaining Customer-funded demandside management (DSM) project duration as of April 1, 2024, to remain on the Stepped Rate until the end of the fiscal 2026 Billing Year (as defined in Appendix D-3 of the Application) and to transition RS 1823 and RS 1827 customers to RS 1830 as described in Section 4.7 of the Application and contained in the draft tariff sheets for RS 1830, effective as of the later of April 1, 2024 or the first day of the fourth calendar month following the date of the BCUC order;
- v. Cancellation of RS 1825, 1827 and 1852, effective as of the later of April 1, 2024 or the first day of the fourth calendar month following the date of the BCUC order; and
- vi. Cancellation of RS 1823, effective at the end of the fiscal 2026 Billing Year;
- E. BC Hydro proposes a three-year transition with three segmented flat transition rates (Segmented Rates) to ease bill impacts for affected customers between fiscal 2025 and fiscal 2027 (Proposed Transition). The Proposed Transition also incorporates flexibility for certain customers that have undertaken energy efficiency projects at their facilities by providing these customers the option to remain on RS 1823 for two additional years. That is, customers with remaining duration from Customer-funded DSM projects as of April 1, 2024 would have the option to remain on RS 1823 until fiscal 2027;
- F. On August 23, 2023, BC Hydro filed an update to the Application requesting BCUC approval of a revised RS 3808 for Transmission service to FortisBC Inc. (Evidentiary Update);
- G. BC Hydro requests that the following exhibits be kept confidential on the basis that they contain customerspecific commercially sensitive information (Confidential Exhibits):
  - i. Exhibit B-4-1, BC Hydro submitting confidential responses to BCUC IR No. 1;
  - ii. Exhibit B-5-1, BC Hydro submitting confidential responses to Intervener IR No. 1, including confidential Excel file attachments;
  - iii. Exhibit B-9, BC Hydro submitting confidential responses to BCUC IR No. 2; and
  - iv. Exhibit B-11, BC Hydro submitting confidential responses to Intervener IR No. 2, including a confidential Excel file attachment; and
- H. The BCUC has reviewed the Application, evidence and arguments filed by all parties in the proceeding and makes the following determinations.

**NOW THEREFORE** pursuant to sections 58 to 61 of the *Utilities Commission Act* and for the reasons provided in the decision issued concurrently with this order, the BCUC orders as follows:

- 1. The Proposed Flat Rate (RS 1830), as shown in Appendix D-3 of the Application and as adjusted to reflect the general rate changes approved by the BCUC for fiscal 2025, is approved, effective April 1, 2024.
- 2. RS 1830 for fiscal 2026 and 2027, as shown in Appendix D-4 of the Application and as adjusted to reflect the cumulative impact of any general rate changes approved by the BCUC between the date of the Application and the effective date of the said schedule (i.e. for fiscal 2026 or fiscal 2027), is also approved, effective April 1, 2025 and April 1, 2026, respectively.

- 3. BC Hydro's Proposed Transition is approved to move RS 1823 and RS 1827 customers to RS 1830, as outlined in the directives and determinations in this order and the decision issued concurrently, effective April 1, 2024.
- 4. RS 1823 is closed to new customers, effective April 1, 2024.
- 5. Amendments to RS 1823, as shown in Appendix D-2 of the Application and as adjusted to reflect the general rate changes approved by the BCUC for fiscal 2025, is approved, effective April 1, 2024.
- 6. BC Hydro is directed to notify customers with remaining duration from Customer-funded DSM projects of their eligibility to stay on RS 1823 during the transition period within 30 days of the date of this order.
- 7. BC Hydro is approved to recover the revenue shortfall resulting from customers electing to stay on the Stepped Rate during the Proposed Transition from all ratepayers.
- 8. BC Hydro is directed to notify customers of the energy charge(s) that they are eligible for under RS 1830 based on fiscal 2020 and fiscal 2022 billing data within 30 days of the date of this order.
- 9. BC Hydro is directed to recover the revenue shortfall resulting from the customers' choice of year for segmentation from the Transmission service class through repricing the Segmented Rates.
- 10. Amendments to RS 1280, RS 1880, RS 1891 and RS 1892, as shown in Appendix D-2 of the Application and as adjusted to reflect the general rate changes approved by the BCUC for fiscal 2025, are approved, effective April 1, 2024.
- 11. RS 1825, RS 1827 and RS 1852 are cancelled, effective April 1, 2024.
- 12. Amendments to the Tranche 1 energy price and demand charge of RS 3808, as shown in Appendix B of the Evidentiary Update and as adjusted to reflect the general rate changes approved by the BCUC for fiscal 2025, are approved, effective April 1, 2024.
- 13. RS 3808 for fiscal 2026 and 2027, as shown in Appendix B and as adjusted to reflect the cumulative impact of any general rate changes approved by the BCUC between the date of the Application and the effective date of the said schedule (i.e. for fiscal 2026 or fiscal 2027), is also approved, effective April 1, 2025 and April 1, 2026, respectively. Effective April 1, 2027 and each April 1st thereafter, the RS 3808 Tranche 1 energy price and the RS 3808 demand charge shall be adjusted to be equal to the RS 1830 energy and demand charges, respectively.
- 14. BC Hydro is directed to monitor load growth after the transition period and examine the impact of the change in rate structure on Transmission service class load and potential implications for rate repricing, and to report this to the BCUC by March 31, 2030.
- 15. RS 1823 is cancelled, effective as of the end of the fiscal 2026 Billing Year.
- 16. The Confidential Exhibits will be kept confidential due to their customer-specific commercially sensitive nature until the BCUC determines otherwise.
- 17. BC Hydro is directed to file updated tariff sheets reflecting the general rate changes approved by the BCUC for fiscal 2025 following the BCUC's decision on BC Hydro's Fiscal 2023 to Fiscal 2025 Revenue Requirements Application as a compliance filing within 30 days of the date of this order.

#### Order G-353-23

DATED at the City of Vancouver, in the Province of British Columbia, this 15<sup>th</sup> day of December 2023.

**BY ORDER** 

Original signed by:

T. A. Loski Commissioner British Columbia Hydro and Power Authority Transmission Service Rate Design Application

# **Glossary and List of Acronyms**

Term / Acronym	Description
АМРС	Association of Major Power Customers
Application	The Transmission Service Rate Design Application filed by British Columbia Hydro and Power Authority on March 16, 2023
BC Hydro	British Columbia Hydro and Power Authority
BC Hydro 2015 RDA Decision	Decision and Order G-5-17 dated January 20, 2017 on BC Hydro 2015 Rate Design Application
BCOAPO or BCOAPO et al.	BC Old Age Pensioners' Organization, Council of Senior Citizens' Organizations of BC, Active Support Against Poverty, Disability Alliance BC, Tenants Resource and Advisory Centre, and Together Against Poverty Society
BCSEA	BC Sustainable Energy Association
BCUC	British Columbia Utilities Commission
Billing Year	The 12-month period starting with the first day of the customer's billing period which commences nearest to April 1 in a year and ending on the last day of such 12-month period
Canfor	Canadian Forest Products Ltd.
САРР	Canadian Association of Petroleum Producers
CBL	Customer Baseline Load
The CEC	Commercial Energy Consumers Association of BC
Chemtrade	Chemtrade Logistics Inc.
DSM	Demand-side management
Embedded cost of energy (or average embedded costs of energy)	The energy-related costs of the existing BC Hydro system that are allocated to each customer class through BC Hydro's fully allocated cost of service studies, expressed on a unit basis
Evidentiary Update	BC Hydro's update to the Application filed on August 23, 2023
FBC	FortisBC Inc.
FortisBC	FortisBC Energy Inc. and FortisBC Inc. collectively
IR	Information request
kVA	Kilovolt ampere

Term / Acronym	Description
kWh	Kilowatt hour
Levelized marginal cost of energy	For example, BC Hydro's 10-year levelized marginal cost of energy refers to the present value of BC Hydro's annual marginal costs of energy (\$ per MWh) over 10 years divided by the present value of the energy (1 MWh per year) over the same 10 years
Load factor	The ratio of energy consumed during a given period of time, to that which would have been consumed if the load had operated at peak 100 percent of that time. A high-load factor indicates steady usage. A low-load factor indicates the recorded demand was not present for very long
Long-run marginal cost of energy	The cost of the next cheapest group (or block) of generation resources to be considered during system deficit in the energy load resource balance
MABC	Mining Association of BC
Mount Milligan	Mount Milligan Mine
MoveUP	Movement of United Professionals
MWh	Megawatt hour
NPV	Net present value
Proposed Flat Rate	BC Hydro's Rate Schedule 1830, with a flat rate structure, proposed in the Application to replace its existing Rate Schedule 1823 and Rate Schedule 1827
Proposed Transition	BC Hydro proposes a three-year transition to the Proposed Flat Rate in the Application to ease bill impacts for affected customers between fiscal 2025 and fiscal 2027 (also BC Hydro's hybrid approach)
RS	Rate Schedule
Segmented Rates	The three segmented flat rates developed by BC Hydro to transition customers on RS 1823 and RS 1827 to the new RS 1830 during the Proposed Transition
Stepped Rate	Rate Schedule 1823 – Transmission Service – Stepped Rate is BC Hydro's default rate for Transmission service for customers receiving firm electricity service at Transmission voltage at the time of the Application
TS 74	Tariff Supplement 74 – CBL Determination Guidelines
TSR	Transmission Service Rate

## **APPENDIX A**

Term / Acronym	Description
UCA	Utilities Commission Act
West Fraser	West Fraser Mills Ltd.

# IN THE MATTER OF the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

British Columbia Hydro and Power Authority Transmission Service Rate Design Application

#### EXHIBIT LIST

#### Exhibit No.

# Description

#### **COMMISSION DOCUMENTS**

A-1	Letter dated March 23, 2023 – Appointing the Panel for the review of BC Hydro Transmission Service Rate Design Application
A-2	Letter dated April 4, 2023 – BCUC Order G-77-23 establishing a regulatory timetable and Notice
A-3	Letter dated May 18, 2023 – BCUC Information Request No. 1 to BC Hydro
A-4	Letter dated June 28, 2023 – BCUC Order G-165-23 amending the regulatory timetable
A-5	Letter dated August 2, 2023 – BCUC Order G-205-23 establishing a further regulatory timetable
A-6	Letter dated August 31, 2023 – BCUC Information Request No. 2 to BC Hydro
A-7	Letter dated October 18, 2023 – BCUC Order G-277-23 establishing a further regulatory timetable with Reasons for Decision
A-8	Letter dated November 16, 2023 – BCUC Order G-312-23 with Reasons for Decision regarding BCOAPO extension request

#### **APPLICANT DOCUMENTS**

B-1 BRITISH COLUMBIA HYDRO AND POWER AUTHORITY (BC HYDRO) - Transmission Service Rate Design Application dated March 16, 2023

# Description

B-1-1	Letter dated May 5, 2023 – BC Hydro submitting erratum to the Application
B-1-2	Letter dated July 31, 2023 – BC Hydro submitting erratum to the Application
B-1-3	Letter dated October 6, 2023 – BC Hydro submitting Errata No. 3 to the Application
B-2	Letter dated April 18, 2023 – BC Hydro submitting Public Notice in compliance with Order G-77-23
B-3	Letter dated June 26, 2023 – BC Hydro submitting extension request
B-4	<b>PUBLIC</b> - Letter dated July 11, 2023 – BC Hydro submitting redacted responses to BCUC Information Request No. 1
B-4-1	<b>CONFIDENTIAL</b> - Letter dated July 11, 2023 – BC Hydro submitting confidential responses to BCUC Information Request No. 1
B-5	<b>PUBLIC</b> - Letter dated July 11, 2023 – BC Hydro submitting redacted responses to Intervener Information Requests No. 1
B-5-1	<b>CONFIDENTIAL</b> - Letter dated July 11, 2023 – BC Hydro submitting confidential responses to Intervener Information Requests No. 1
B-6	Letter dated August 23, 2023 – BC Hydro submitting request for approval of Revised Rate Schedule 3808 Transmission Service – FortisBC Inc.
B-7	Letter dated September 28, 2023 – BC Hydro submission on further process
B-8	<b>PUBLIC</b> - Letter dated September 28, 2023 – BC Hydro submitting responses to BCUC Information Request No. 2
B-8-1	<b>PUBLIC</b> - Letter dated October 6, 2023 – BC Hydro submitting revisions to responses to BCUC Information Request No. 1
B-9	<b>CONFIDENTIAL</b> - Letter dated September 28, 2023 – BC Hydro submitting responses to BCUC Information Request No. 2
B-10	PUBLIC - Letter dated September 28, 2023 – BC Hydro submitting responses to Intervener Information Requests No. 2

# Description

B-10-1	<b>PUBLIC</b> - Letter dated October 6, 2023 – BC Hydro submitting revisions to responses to Intervener Information Requests No. 1
B-11	<b>CONFIDENTIAL</b> - Letter dated September 28, 2023 – BC Hydro submitting responses to Intervener Information Requests No. 2
B-12	Letter dated October 6, 2023 – BC Hydro submission on further process
B-13	Letter dated October 16, 2023 – BC Hydro reply submission on further process
B-14	Letter dated November 2, 2023 – BC Hydro submitting revised responses to AMPC Information Request No. 1

#### **INTERVENER DOCUMENTS**

C1-1	FORTISBC ENERGY INC. (FORTISBC) – Letter dated April 10, 2023 submitting request to intervene by Sarah Walsh
C1-2	Letter dated May 26, 2023 – FortisBC submitting Information Request No. 1 to BC Hydro
C2-1	<b>Movement of United Professionals (MoveUP)</b> – Letter dated April 12, 2023 submitting request to intervene by Jim Quail
C2-2	Letter dated May 26, 2023 – MoveUP submitting Information Request No. 1 to BC Hydro
C3-1	<b>CANADIAN ASSOCIATION OF PETROLEUM PRODUCERS (CAPP)</b> – Letter dated April 25, 2023 submitting request to intervene by David Bursey, Bennett Jones
C3-1-1	Letter dated May 19, 2023 – CAPP submitting request to intervene amendment regarding PCA Funding
C3-2	Letter dated May 26, 2023 – CAPP submitting Information Request No. 1 to BC Hydro
C3-3	Letter dated August 30, 2023 – CAPP submitting Information Request No. 2 to BC Hydro

# Description

C3-4	Letter dated October 6, 2023 – CAPP submission on further process
C4-1	<b>BC SUSTAINABLE ENERGY ASSOCIATION (BCSEA)</b> - Letter dated April 26, 2023 Request to Intervene by T. Hackney and W.J. Andrews
C4-2	Letter dated May 26, 2023 – BCSEA submitting Information Request No. 1 to BC Hydro
C4-3	Letter dated August 31, 2023 – BCSEA submitting Information Request No. 2 to BC Hydro
C4-4	Letter dated October 4, 2023 – BCSEA submission on further process
C5-1	<b>CHEMTRADE LOGISTICS (CHEMTRADE)</b> - Letter dated April 19, 2023 Request to Intervene by Wayne Yan
C6-1	MINING ASSOCIATION OF BC (MABC) - LETTER DATED APRIL 19, 2023 REQUEST TO INTERVENE BY MICHAEL GOEHRING
C6-2	LETTER DATED MAY 26, 2023 – MABC SUBMITTING INFORMATION REQUEST NO. 1 TO BC HYDRO
C6-3	LETTER DATED OCTOBER 10, 2023 – MABC SUBMISSION ON FURTHER PROCESS
C7-1	SIMON FRASER UNIVERSITY (SFU) - LETTER DATED APRIL 28, 2023 REQUEST TO INTERVENE BY BERNARD CHAN
C8-1	West Fraser Mills Ltd. (West Fraser) - Letter dated April <b>30, 2023 R</b> equest to Intervene by Harpuneet Ghuman
C9-1	COMMERCIAL ENERGY CONSUMERS ASSOCIATION OF BC (CEC) - LETTER DATED MAY 1, 2023 REQUEST TO INTERVENE BY DAVID CRAIG
C9-2	LETTER DATED MAY 26, 2023 – CEC SUBMITTING INFORMATION REQUEST NO. 1 TO BC HYDRO
C9-3	LETTER DATED AUGUST 31, 2023 – CEC SUBMITTING INFORMATION REQUEST NO. 2 TO BC HYDRO
C9-4	LETTER DATED OCTOBER 10, 2023 – CEC SUBMISSION ON FURTHER PROCESS

C10-1	BC OLD AGE PENSIONERS' ORGANIZATION, COUNCIL OF SENIOR CITIZENS' ORGANIZATIONS OF BC,
	ACTIVE SUPPORT AGAINST POVERTY, DISABILITY ALLIANCE BC, TENANTS RESOURCE AND ADVISORY
	CENTRE, AND TOGETHER AGAINST POVERTY SOCIETY (BCOAPO) - Letter dated May 1, 2023
	Request to Intervene by Irina Mis

- C10-2 Letter dated May 26, 2023 BCOAPO submitting Information Request No. 1 to BC Hydro
- C10-3 Letter dated August 31, 2023 BCOAPO submitting Information Request No. 2 to BC Hydro
- C10-4 Letter dated October 10, 2023 BCOAPO submission on further process
- C10-5 Letter dated November 15, 2023 BCOAPO submitting extension request to file Final Argument
- C11-1 Association OF MAJOR POWER CUSTOMERS (AMPC) Letter dated May 1, 2023 Request to Intervene by Melissa Davies
- C11-2 Letter dated May 26, 2023 AMPC submitting Information Request No. 1 to BC Hydro
- C11-3 Letter dated August 31, 2023 AMPC submitting Information Request No. 2 to BC Hydro
- C11-4 Letter dated September 18, 2023 AMPC submission on further process
- C12-1 Paper Excellence (Paper Excellence) Letter dated May 1, 2023 Request to Intervene by Carlo Dal Monte
- C13-1 City of New Westminster (CoNW) Letter dated May 1, 2023 Request to Intervene by Penny Cochrane
- C14-1 Canadian Forest Products Ltd. (Canfor) Letter dated May 1, 2023 Request to Intervene by Danika Doucette

#### LETTERS OF COMMENT

D-1 **CHEMTRADE LOGISTICS INC. (CHEMTRADE)** – Letter of Comment dated October 25, 2023

# Description

- D-2 **PAPER EXCELLENCE** Letter of Comment dated October 27, 2023
- D-3 MOUNT MILLIGAN MINE (MOUNT MILLIGAN) Letter of Comment dated October 27, 2023
- D-4 **CANFOR -** Letter of Comment dated October 27, 2023
- D-5 WEST FRASER Letter of Comment dated October 27, 2023