



IN THE MATTER OF

**British Columbia Hydro and Power Authority
2015 Rate Design Application**

**DECISION
and Order G-5-17**

January 20, 2017

Before:

D. M. Morton, Commissioner/Panel Chair

D. A. Cote, Commissioner

K. A. Keilty, Commissioner

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EXECUTIVE SUMMARY

British Columbia Hydro and Power Authority's (BC Hydro) 2015 Rate Design Application (Application, RDA) filed on September 24, 2015 is its first comprehensive rate design application since 2007, and only the third such application in BC Hydro's history. This rate design application contains BC Hydro's F2016 Cost of Service study; proposals for default Residential, Small General Service, Medium General Service, Large General Service and Transmission Service rates; and proposals for its Electric Terms and Conditions.

BC Hydro approvals sought

The purpose of the Application is to update BC Hydro's default rate structures and Electric Tariff Terms and Conditions to reflect current conditions. BC Hydro seeks approval of eleven major elements in this Application:

1. The division of the existing Street Lighting rate class into two new rate classes;
2. Approval of certain pricing principles for Residential rates;
3. Amending certain terms and conditions in the Residential E-Plus rate schedule regarding interruptibility of that service;
4. One-time increase to the Small General Service (SGS) rate class' basic charge that would increase the recovery of BC Hydro's customer-related costs from approximately 35 percent to 45 percent, and a one-time offsetting decrease in the energy rate to maintain forecast revenue neutrality;
5. A new rate structure for customers who take service under Medium General Service (MGS) rate class, which includes a flat demand charge set to recover approximately 35 percent of BC Hydro's demand-related costs, and a flat energy rate established to maintain forecast revenue neutrality;
6. A new rate structure for Large General Service (LGS) customers, which includes a flat demand charge established to recover approximately 65 percent of BC Hydro's demand-related costs and a flat energy rate set to maintain forecast revenue neutrality based on the LGS revenue target;
7. Amendments to Rate Schedule (RS) 12xx eliminating the applicability of the rate to the large and medium general service control group of customers; the elimination of Rate Schedule 26xx; and the elimination of Tariff Supplement (TS) No. 82 Rules for LGS Prospective Growth Applications;
8. Approval of certain pricing principles for Transmissions Service Rate (TSR) customers under RS 1823 for each of F2017 to F2019;
9. A revision to the definition of "Availability" and a change in the RS 1852 definition of High Load Hours (HLH) allowing BC Hydro's discretion to determine the HLH periods that will apply based on a customer location/region, which affords BC Hydro the possibility to curtail in order to alleviate potential local or regional transmission constraints or take advantage of a market opportunity;
10. A freshet rate pilot for the period March 1, 2016 to December 31, 2017 to be available to TSR customers presently taking service under RS 1823 who apply to BC Hydro for this service; and
11. Approval of the Electric Tariff Terms and Conditions, originally attached as Appendix G-1 to the Application, then amended and filed as Exhibit B-1-1, including final approval of the Minimum Reconnection standard charge effective April 1, 2017.

Based on stakeholder feedback, BC Hydro also identified several items for expedited review processes and/or advanced approval:

- i. Amendments to MGS and LGS rate structures for customers without historical baselines from 85 percent of monthly consumption billed at the Part 1 energy rates and 15 percent of monthly consumption billed at the Part 2 energy rates, effective January 1, 2016.¹
- ii. For TSR customers under RS 1823 to continue with the implicit pricing principles to uniformly increase each pricing elements by the amount of the approved F2015/F2016 Revenue Requirement Application (RRA) rate increases, with a one-time F2017 adjustment in accordance with subsection 3(1) of Direction No. 7 to the Commission.
- iii. Approval for the continuation of certain existing Transmission Service rates in which no significant issues were raised in BC Hydro's 2015 stakeholder engagement process.
- iv. Approval for the freshet rate pilot by February 1, 2016 to ensure BC Hydro has time to implement a Commission decision by March 1, 2016.²

The Commission Panel has reviewed the evidence in this proceeding with consideration of the various legal and policy frameworks as described by BC Hydro in the Application, along with the parameters of its jurisdictional powers under sections 59-61 of the *Utilities Commission Act* (UCA). The Panel also takes into consideration the government's Rate Rebalancing Amendment of the UCA³, which states that the Commission must not set rates for the purposes of changing the revenue to cost ratio for a class of customers.

The review process of the Application included a procedural conference, various rounds of information requests (IRs) and responses, a negotiated settlement process, a streamlined review process, intervener submissions of evidence, along with IRs and responses on that evidence, an oral public hearing process, followed by arguments and reply arguments from certain parties.

Previously during the course of this proceeding, the Panel has provided the following approvals and determinations:

- The proposed reduction to BC Hydro's Minimum Reconnection charge from \$125 to \$30 was approved on an interim basis effective December 1, 2015 by Order G-175-15 and further approved as permanent in Order G-5-17 attached to this decision.
- On February 9, 2016, the Commission issued Order G-16-16 approving BC Hydro's amendments to certain MGS and LGS rate schedules, approving the pricing for customers without historical baselines from 85/15 pricing to 100 percent Part 1 pricing.
- On February 19, 2016, the Commission issued Order G-20-16 approving BC Hydro's proposed amendments to various transmission rate schedules: RS 1827, 1853, 1253.
- By Order G-47-16 dated April 11, 2016, the Panel approved the Negotiated Settlement Agreement pertaining to BC Hydro's Cost of Service Study and Street Lighting rate class segmentation.
- The Commission issued Order G-128-16 directing BC Hydro to commence consultation with the Commercial Energy Consumers Association of British Columbia and if appropriate to bring the matter forward in BC Hydro's subsequent rate design module.

¹ Exhibit B-1, p. 1-24.

² Exhibit B-1, p. 1-24.

³ UCA section 58.1

In this decision the Panel provides the following approvals and determinations:

- Effective April 1, 2017, BC Hydro is approved to apply the residential inclining block (RIB) rate principles that:
 - Price increases should be applied equally to all three RIB pricing elements;
 - The current basic charge cost should be maintained;
 - There should be no minimum charge in addition to the basic charge; and
 - The current Step1/Step 2 thresholds are to be maintained.
- BC Hydro is directed to phase out the residential E-Plus rate program over five years, commencing April 1, 2017. BC Hydro is directed to submit a compliance filing within 30 days of the date of this decision which outlines a proposal for achieving the five-year phase out of the E-Plus program and results in rates being charged to E-Plus customers at the end of the five-year phase-out period which equate to other British Columbia residential customers at that time. BC Hydro is also directed to waive the requirement for alternative heating system and eliminate the possibility of service being interrupted over this transition period.
- Effective April 1, 2017, approval of BC Hydro's proposal to retain the existing flat energy rate structure for the SGS rate class and to increase the SGS basic charge recovery of customer-related costs from approximately 33 percent to 45 percent on a one-time basis with a one-time offsetting reduction to the energy rate. The annual revenue requirement increase shall be applied equally to all the elements within each rate structure for the SGS rate class thereafter.
- Effective April 1, 2017, approval of BC Hydro's proposal for MGS rate structures to:
 - replace the existing MGS two-part energy rate with a flat energy rate;
 - replace the existing three-step inclining block demand charge with a flat demand charge; and
 - increase the recovery of demand-related costs in the demand charge from approximately 15 percent to 35 percent.
- Effective April 1, 2017, approval of BC Hydro's proposal for LGS rate structures to:
 - replace the existing LGS two-part energy rate with a flat energy rate;
 - replace the existing three-step demand charge with a flat demand charge; and
 - increase the demand charge recovery of demand-related costs from approximately 50 percent to 65 percent.
- Other determinations made by the Panel regarding general service rates are:
 - TS No. 82 is to be terminated as it is no longer required. Any remaining customers shall be transferred to RS 16XX effective April 1, 2017.
 - LGS and MGS control groups taking services under RS 12XX are to be dissolved given that control groups are not required for research purposes.
 - The Panel directs Rate Schedule 26xx be terminated as need for an exempt rate no longer exists.

- Pertaining to BC Hydro’s Electric Tariff Terms and Conditions:
 - All changes to the standard charges shown in Table 6-1 of this decision, are approved effective April 1, 2017.
 - Approval for BC Hydro to maintain its Late Payment Charge at 1.5 percent per month.
 - Approval of two changes to the Electric Tariff language regarding the application of security deposits which will allow for better protection to BC Hydro from bad debt exposure.
 - Approval for BC Hydro to amend the Electric Tariff definition of ‘Radio-off Meter’ to confirm that a Radio-off meter’s components that transmit and receive data are deactivated.”

Low Income Proposals

In addition to BC Hydro’s proposals contained in the Application, some interveners also sought Commission approval of additional requests. The most extensive requests were brought forward by the British Columbia Old Age Pensioners’ Organization, Disability Alliance BC, Council of Senior Citizens’ Organizations of BC, and the Tenant Resource and Advisory Centre (BCOAPO). These issues are dealt with in section 7.0 of this decision.

Overall, BCOAPO is asking the Commission “to implement a strategy to assist low income ratepayers who are having increasing difficulty paying their electricity bills in an environment where electricity rates continue to rise while many people’s incomes have stagnated.”⁴

BCOAPO proposes the Commission direct BC Hydro to implement several low-income programs including an essential services usage block (ESUB) rate and a crisis intervention fund (CIF). BCOAPO also proposes amendments to the BC Hydro Electric Tariff for qualified low income customers and it requests that BC Hydro be directed to adopt several business practices in support of low income customers. For these proposals, BCOAPO presented evidence of poverty in BC through its expert witness, as well as the testimony of advocate witnesses and individual BC Hydro residential ratepayers.

In review of these proposals, the Panel made extensive considerations which include the Commission’s detailed review of its jurisdiction to approve low-income rates in the absence of a regulatory justification. This involved a comprehensive analysis of the Commission’s explicit and implied powers under the UCA, including its mandate to approve rates that are not “unjust, unreasonable, and unduly discriminatory.” The Commission review also analyzed BCOAPO’s comments on certain past statements made in the legislature, proposed amendments made to the UCA in which ‘a discounted lifeline rate in order to maintain the affordability of energy’ were either defeated or did not progress past first reading, and BCOAPO’s argument for the Commission to make ‘dynamic interpretation of the legislation’ under the *Interpretation Act*.

In summary, the Panel finds that low income rates unsupported by an economic or cost of service justification are unjust, unreasonable and unduly discriminatory and are therefore not in accordance with section 59 of the UCA. The Panel finds no evidence of legislative intent to provide the Commission with jurisdiction to set low-income rates and there is no evidence the legislature intended the UCA to provide jurisdiction for low-income rates in the absence of an economic or cost of service justification.

⁴ BCOAPO Final Argument dated October 11, 2016, p. 3.

In this consideration, the Panel also extended its review to how statutes similar to the UCA have been interpreted by courts and commissions in other jurisdictions. This review included rulings from five Canadian jurisdictions (Ontario, Nova Scotia, New Brunswick, Alberta and Manitoba) which were relied on by the parties in this proceeding to support their positions.

The Panel finds that in the case of Ontario and Manitoba, where there was support for low income rates in the absence of an economic or cost of service basis, there is insufficient similarity between the jurisdictional context in BC and in those provinces. However, in the case of Nova Scotia, New Brunswick and Alberta, where there was no support for low income rates in the absence of an economic or cost of service basis, there was sufficient similarity to provide the Panel guidance. Therefore, regardless of the weight applied to any of these findings, the Panel finds a clear directional guidance that indicates that there is no support for low income rates in the absence of an economic or cost of service basis in jurisdictions that have similar regulatory contexts as BC.

In terms of the certain rate proposals from BCOAPO, the Commission Panel:

- Denies BCOAPO's request to establish an essential services usage block rate for qualified low-income ratepayers.
- Directs BC Hydro to prepare and file, within six months of the date of the issuance of this decision, a proposed crisis intervention fund pilot program for residential customers who have arrears with BC Hydro and are unable to pay their electricity bills. BC Hydro has indicated that it is prepared to work collaboratively with the low-income advisory group in the development of its proposal, and the Commission expects that it will do so.
- Denies BCOAPO's proposals to amend the Electric Tariff to exempt low-income customers from the minimum reconnection charge and account charge, and to waive security deposits for low income customers.
- Does not approve the following proposals put forth by BCOAPO for low income customers: banning the use of external credit scores; exempting low income customers from late payment charges, and requesting that the Commission recommend BC Hydro be required to expand installs of its low-income Energy Conservation Assistance Program to serve a significantly higher percentage of the low-income households.
- BC Hydro is directed to provide an analysis of the costs and benefits associated with BCOAPO's customer segmentation analysis and data collection and reporting within six months of the establishment of the low-income advisory group. BC Hydro has indicated it is prepared to work collaboratively with the low-income advisory group in this analysis, and the Commission expects that it will do so.

RIB Rate Report to the Government of British Columbia

On July 6, 2015, the BC Minister of Energy and Mines sent a letter (Letter) to the Commission requesting a report on several listed issues relating to BC Hydro's RIB rate and FortisBC Inc.'s Residential Conservation Rate. The Letter posed five questions concerning the use of the RIB rate and further directed the Commission to use this proceeding as the process to collect information from BC Hydro concerning the RIB rate for the Commission report. The Commission will provide its report to the Minister in due course.

1.0 INTRODUCTION

The Application filed on September 24, 2015 is British Columbia Hydro and Power Authority's (BC Hydro) first comprehensive Rate Design Application (RDA) since 2007, and only the third such application in BC Hydro's history. The 2015 RDA is filed in compliance with Direction 4 of British Columbia Utilities Commission (Commission, BCUC) Order G-13-14 and contains:

- BC Hydro's F2016 Cost of Service study;
- BC Hydro's proposals for default Residential, Small General Service, Medium General Service, Large General Service and Transmission Service rates (TSR); and
- BC Hydro's proposals for its Electric Terms and Conditions.

BC Hydro refers to the above topics as Module 1 and plans to address voluntary Residential and General Service options as part of its Module 2 filing. In this way, Module 1 sets the foundation for future BC Hydro proposals concerning Residential and General Service customers rate options.⁵ BC Hydro foresees filing Module 2 subsequent to the Commission's Module 1 determinations.

The purpose of the Application is to update BC Hydro's default rate structures and Electric Tariff Terms and Conditions to reflect current conditions. Default rates are defined by BC Hydro as rates that all customers pay unless they have options and choose to opt for another rate. Optional rates are rates that customers can voluntarily choose to be on.⁶

1.1 The applicant

BC Hydro is a Crown corporation established in 1964 under the *Hydro and Power Authority Act* and is the third largest electric utility in Canada. BC Hydro serves 94 percent of the province, with the exception of the City of New Westminster (New Westminster) and the south-central part of the province, which is served by FortisBC Inc. (FortisBC).

BC Hydro's integrated electric system includes 30 hydroelectric generating facilities, two natural gas-fired generating facilities and a number of independent power producer (IPP) projects with whom BC Hydro contracts. BC Hydro delivers electricity over 72,000 kilometers of transmission and distribution lines. These assets form BC Hydro's main electrical system used to serve customers connected to the integrated system or 'grid'. Additionally, there are off-grid Non-Integrated Areas (NIAs) which are not connected to BC Hydro's main electric system. In BC Hydro's Electric Tariff, NIAs consist of Zone II (Anahim Lake, Atlin, Bella Coola, Dease Lake, Ehlateese, Fort Ware, Haida Gwaii, Hartley Bay, Telegraph Creek District, Toad River and Tsay Keh) and Zone IB (Bella Bella).⁷

⁵ Exhibit B-1, p. 1-22.

⁶ Ibid., pp. 1-1, 1-19.

⁷ Ibid., pp. 1-15, 1-16.

1.2 Approvals sought

BC Hydro seeks approval of eleven major elements in this Application:

1. The division of the existing Street Lighting rate class into two new rate classes: customer-owned Street Lighting and BC Hydro-owned Street Lighting;
2. Approval of certain pricing principles for Residential rates (RS 1101/1121) for BC Hydro's fiscal years F2017 – F2019 effective April 1, 2017;
3. Amended terms and conditions in rate schedule (RS) 1105 regarding interruptibility of that service (Residential E-Plus Amendment) effective April 1, 2017;
4. Effective April 1, 2017, a one-time increase to RS 13xx basic charge that would allow the basic charge to recover approximately 45 percent of BC Hydro's customer-related costs attributable to the Small General Service (SGS) rate class in the F2016 Cost of Service (COS) study, and a one-time offsetting decrease in the energy rate to maintain forecast revenue neutrality based on the SGS revenue target calculated using any applicable rate increases arising from the F2017 Revenue Requirements Application (RRA) (SGS Proposal);
5. Effective April 1, 2017, a new rate structure for customers who take service under RS 15xx with a flat demand charge set to recover approximately 35 percent of BC Hydro's demand-related costs attributable to the Medium General Service (MGS) rate class in the F2016 COS study and a flat energy rate established to maintain forecast revenue neutrality based on the MGS revenue target calculated using any applicable rate increases arising from the F2017 RRA (MGS Proposal);
6. Effective April 1, 2017, a new rate structure for customers who take service under RS 16xx with a flat demand charge established to recover approximately 65 percent of BC Hydro's demand-related costs attributable to the Large General Service (LGS) rate class in the F2016 COS study and a flat energy rate set to maintain forecast revenue neutrality based on the LGS revenue target calculated using any applicable rate increases arising from the F2017 RRA (LGS Proposal);
7. Amendments to Rate Schedule 12xx effectively eliminating the applicability of the rate to the large and medium general service control group of customers; the elimination of Rate Schedule 26xx; and the elimination of Tariff Supplement (TS) No. 82 Rules for LGS Prospective Growth Applications;
8. Approval of certain pricing principles for RS 1823 for each of F2017 to F2019;
9. A revision to the definition of "Availability" and a change in the RS 1852 definition of High Load Hours (HLH) allowing BC Hydro's discretion to determine the HLH periods that will apply based on a customer location/region which affords BC Hydro the possibility to curtail in order to alleviate potential local or regional transmission constraints or take advantage of a market opportunity;
10. Transmission Service freshet rate pilot for the period March 1, 2016 to December 31, 2017 to be available to Transmission Service customers presently taking service under RS 1823 who apply to BC Hydro for this service; and
11. Approval of the Electric Tariff Terms and Conditions, originally attached as Appendix G-1 to the Application, then amended and filed as Exhibit B-1-1, including final approval of the Minimum

Reconnection standard charge effective April 1, 2017. The Minimum Reconnection charge was approved on an interim basis effective December 1, 2015 by Order G-175-15.⁸

In addition to the above approvals sought and based on stakeholder feedback, BC Hydro identified several items for expedited review processes and/or advanced approval:

- (i) Amendments to RS 1500/1501/1510/1511 and RS 1600/1601/1610/1611 to change the pricing for customers without historical baselines from 85 percent of monthly consumption billed at the Part 1 energy rates and 15 percent of monthly consumption billed at the Part 2 energy rates (referred to as 85/15 Pricing in the Application) to 100 percent of the monthly consumption billed at the Part 1 energy rate (100 percent Part 1 Pricing), effective January 1, 2016.⁹
- (ii) RS 1823 F2017-F2019 Pricing Principles to continue with the implicit principles in subsection 3(c) of Direction No. 68 to the Commission, which provides that the Commission must uniformly increase the pricing elements of RS 1823 by the amount of the approved F2015/F2016 RRA rate increases, with a one-time F2017 adjustment to comply with subsection 3(1) of Direction No. 7 to the Commission. Advanced approval is necessary given that the current RS 1823 pricing principles expire on March 31, 2016.¹⁰
- (iii) Approval for the existing Transmission Service rates given that the 2015 RDA stakeholder engagement process did not result in any significant issues being raised with respect to RS 1852, RS 1825, RS 1827, RS 1853 or RS 1880.¹¹
- (iv) Approval for the freshet rate pilot by February 1, 2016 to ensure BC Hydro has time to implement a Commission decision by March 1, 2016.¹²

1.3 Interveners and interested parties

There were 36 registered interveners and 6 interested parties to this proceeding. Some interveners participated fully in all aspects of the proceeding while others focused on certain specific issues only. The following interveners registered in the proceeding:

- Commercial Energy Consumers Association of British Columbia (CEC);
- British Columbia Old Age Pensioners' Organization, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre (BCOAPO);
- BC Sustainable Energy Association and the Sierra Club of British Columbia (BCSEA);
- Movement of United Professionals (MoveUP);
- British Columbia Ministry of Energy and Mines (MEM);
- Peace River Regional District Board (PPRD);
- Simon Fraser University (SFU);
- University of British Columbia (UBC);

⁸ Exhibit B-1, pp.1-4-1-15 and BC Hydro Final Argument, Appendix B, Draft Order.

⁹ Exhibit B-1, cover letter.

¹⁰ Ibid., pp. 1-10-1-11.

¹¹ Ibid., p. 1-24.

¹² Ibid., pp. 1-13, 1-24.

- Peace Valley Environment Association (PVEA);
- EPlus Homeowners Group (EPHG);
- Roger Bryenton;
- Association of Major Power Customers (AMPC);
- Canadian Association of Petroleum Producers (CAPP);
- Peace Valley Landowner Association (PVLA);
- Vancouver Airport Authority (YVR);
- Clean Energy Association of BC (CEBC);
- Garry Lybeck;
- Progress Energy Canada Ltd. (PEC);
- Jayne Priest;
- Hans Karow;
- Janis Hoffmann;
- Non-Integrated Areas Ratepayers Group (NIARG);
- Bob Tucker;
- Sherry Ridout;
- Lori Hoffmann;
- FortisBC;
- District of Hudson's Hope (DHH);
- Sharon Noble (Noble);
- Dianne Ramage;
- Dewdney Area Improvement District (DAID);
- Bruce Edwards;
- Jim Ervin;
- City of New Westminster, Electric Utility Commission (CNWEUC);
- Ethelyn Rankin;
- City of Vancouver, Neighbourhood Energy Utility (NEU); and
- Zone II Ratepayers Group (Zonell).

The Commission also received various letters of comment from members of the public in this proceeding.

1.4 Intervener requests

In addition to BC Hydro's proposals contained in the Application, some interveners also sought Commission Panel approval of additional requests:

- BCOAPO requested that BC Hydro consider an expedited review for the proposed Minimum Reconnection Charge and requested this proposed charge be put in place before the 2015/2016 winter season.¹³ This request was approved by the Commission in Order G-175-15;

¹³ Exhibit B-1, p. 1-25.

- BCOAPO requests approval for certain low income proposals (further discussed in section 7.0 of this decision); and
- CEC brought forward a proposal for BC Hydro to establish a non-firm interruptible pilot rate for MGS and LGS customers (this proposal was addressed by the Commission in Order G-128-16).¹⁴

1.5 Legal and policy framework

There have been a number of regulatory, legal, and policy developments that have occurred since BC Hydro's last comprehensive rate design in 2007 which have either directly impacted the scope and alternatives considered and/or guided the development of the proposals of BC Hydro's Application. On February 4, 2014, the Commission, through Order G-13-14 (the RIB Re-Pricing Decision), also directed BC Hydro to file an updated RDA in Fiscal 2016.¹⁵ Under BC Hydro's legislative framework, there are several considerations which informed this Application. These include: the government's *Clean Energy Act* (CEA), which sets out BC Hydro's requirement for self-sufficiency and the government's energy objectives; various sections of Direction No. 7 to the Commission, which include certain rate caps and the limitation that the Commission must not set rates for the purposes of changing the revenue to cost ratio for a class of customers (Rate Rebalancing Amendment); Special Direction No. 10 to the Commission, which requires BC Hydro to use the planning criterion of average water; and various government policy objectives such as the continuation of postage stamp rates and the treatment of Heritage Assets.¹⁶

In addition, the BC government conveyed its focus on Transmission Service customer rate design through the 2013 Industrial Electricity Policy Review (IEPR) task force process. The IEPR made several recommendations and the BC government's responses to those recommendations have informed the 2015 RDA contents.¹⁷

Panel discussion

The Commission Panel reviewed the evidence in this proceeding with consideration of the various legal and policy frameworks as described by BC Hydro in the Application, along with the parameters of its jurisdictional powers under sections 59-61 and the Rate Rebalancing Amendment of the *Utilities Commission Act* (UCA).

1.6 Regulatory process

BC Hydro's pre-application process

BC Hydro carried out stakeholder engagement with respect to the 2015 RDA from May 8, 2014 to mid-September 2015 using an array of input streams, including topic specific workshops, customer focus groups, and face-to-face meetings. BC Hydro submits that this engagement not only guided and informed each of the proposals contained in the Application but has resulted in deeper relationships between BC Hydro and its customers.¹⁸ BC Hydro's stakeholder engagement process with Residential E-Plus customers included feedback in a mail-in form, an online form and/or at two open houses held in Nanaimo and Victoria on April 1 and April 2,

¹⁴ Exhibits A-33, A-35, A-37.

¹⁵ BC Hydro Final Argument, p. 4.

¹⁶ Exhibit B-1, pp. 2-3-2-16.

¹⁷ Ibid., p. 2-43.

¹⁸ BC Hydro Final Argument, p. 5.

2015.¹⁹ BC Hydro also established a process for capturing stakeholder comments and documenting how these comments were used in BC Hydro's development of its preferred solutions.²⁰ A high level topical summary of the workshops are outlined in Table 2-1 of the Application.

Regulatory process for the Application

BC Hydro initially proposed one round of information requests (IR) to be followed by a procedural conference to determine: (1) whether expedited approval processes should be pursued for some elements of the Application, with review of the remainder of the Application to proceed by way of a second round of IRs and an oral hearing; and (2) if interveners intend to file evidence.

On September 30, 2015, Commission Order G-156-15 established an initial regulatory timetable and public notice for the Application. This order also set out the first round of IRs and outlined five scoping and process matters to be addressed by parties in written submissions to the Commission.

By Order G-175-15, the Commission Panel made determinations regarding the scoping and process matters and established an expedited process for written arguments on BC Hydro's proposed 100 percent Part 1 Pricing for MGS and LGS customers. The Panel also established a streamlined review process (SRP) for the joint review of the proposed pricing principles for existing transmission service rates, excluding RS 1823, and a review of the proposed freshet rate pilot.

The regulatory timetable was further amended in Orders G-156-15A, G-166-15, G-12-16, G-50-16, and through various Commission letters.

A procedural conference was held on January 19, 2016 to address various procedural matters as outlined in the Commission letter dated January 12, 2016.²¹ Following the procedural conference, the Commission issued Order G-12-16 establishing the remainder of the review process for the Application, which included a second round of IRs on various topics, intervenor evidence and IRs on that evidence, followed by an oral hearing on various topics. The Panel also established that the COS study and Street Lighting rate class segmentation would proceed by way of a single Negotiated Settlement Process (NSP).

An SRP was held on January 25, 2016, regarding BC Hydro's proposed freshet rate pilot and proposed pricing principles for existing transmission service rates. Following the SRP, the Commission issued its Reasons for Decision, attached as Appendix A to Order G-17-16 approving the proposed two-year freshet rate pilot with the rate being effective for the period of March 1, 2016 to October 31, 2017.

On February 9, 2016, the Commission also issued Order G-16-16 approving BC Hydro's amendments to certain MGS and LGS rate schedules approving the pricing for customers without historical baselines from 85/15 pricing to 100 percent Part 1 Pricing.

¹⁹ Exhibit B-1, p. 2-28.

²⁰ Ibid., p. 2-16.

²¹ Exhibit A-10.

On February 19, 2016, the Commission issued Order G-20-16 approving BC Hydro's proposed amendments to various transmission rate schedules: RS 1827, 1853, 1253.

On March 7 and 8, 2016, an NSP was held in Vancouver to discuss the specific topics of the COS study and Street Lighting rate class segmentation. By letters dated February 11 and 16, 2016,²² the Commission Panel informed the parties that Ms. Liisa O'Hara was to serve as the Facilitator in accordance with the Commission's NSP guidelines and invited parties for any comments. By Order G-47-16 dated April 11, 2016, the Panel approved the Negotiated Settlement Agreement (NSA) pertaining to BC Hydro's Cost of Service Study (COSS) and Street Lighting rate class segmentation.

Pertaining to the regulatory review process of Residential E-Plus customers, the Commission sought submissions from parties in its letter dated April 30, 2016²³ and subsequently issued Order G-61-16 establishing the dates for intervenor evidence and a written hearing process on this topic.

Pertaining to CEC's proposal for BC Hydro to establish a non-firm interruptible rate pilot for MGS and LGS customers, the Commission issued Order G-128-16 directing BC Hydro to commence consultation with CEC and if appropriate to bring the matter forward in BC Hydro's Module 2 rate design application.

In accordance with the regulatory timetable, an oral hearing was held on August 16 through 18 and August 23 through 24, 2016. Final arguments from both BC Hydro and BCOAPO, including low income proposals, were submitted on September 26, 2016. Final arguments from all other interveners were filed on October 6 and 11, 2016, followed by reply arguments from BC Hydro and BCOAPO on October 24, 2016.

Residential Inclining Block (RIB) Rate Report to the Government of British Columbia

On July 6, 2015, the BC Minister of Energy and Mines sent a letter (Minister RIB Report Letter) to the Chair of the Commission requesting a report on several listed issues relating to BC Hydro's RIB rate and FortisBC's Residential Conservation Rate. The Minister RIB Report Letter directs the Commission to use the 2015 RDA regulatory review as the process to collect information from BC Hydro concerning the RIB rate for the Commission report rather than initiating a separate process. The letter posed five questions concerning the use of the RIB rate. The Commission, by letter dated August 17, 2015, requested BC Hydro by September 30, 2015, to provide information on the methodologies it is using to gather information and report on the five questions posed in the Minister RIB Report Letter. BC Hydro provides the Commission-requested information in sections 5.5 and 5.6 of the Application.²⁴

²² Exhibits A-18, A-19.

²³ Exhibit A-28.

²⁴ Exhibit B-1, pp. 5-61, 5-72.

2.0 OVERARCHING ISSUES

There were a number of issues raised within the context of the proceeding that directly impact interpretation of the evidence and determinations made on the basis of that evidence. These include the long run marginal cost (LRMC), prioritization of Bonbright principles, and the handling of bill neutrality as opposed to revenue neutrality. The Panel addresses these issues in what follows.

2.1 Long run marginal cost

BC Hydro uses the energy LRMC for various purposes: to signal the value that should be placed on acquiring new energy resources,²⁵ as a reference for purposes of applying the Bonbright economic efficiency criterion;²⁶ and as a basis for the Step 2 rate of certain rate structures to maintain a steady price signal encouraging conservation.²⁷

BC Hydro defines LRMC as the price of the most cost-effective way of satisfying incremental customer demand beyond existing and committed resources as guided by the government approved Integrated Resource Plan (IRP).²⁸ The 2013 IRP analyzes the energy Load-Resource Balance (LRB) for BC Hydro's integrated system, the LRB being the difference between BC Hydro's annual load forecast over a 20-year period and supply from existing and committed Demand Side Management (DSM) and supply-side resources.²⁹ In the Application, BC Hydro submits that DSM and Energy Purchase Agreement (EPA) renewals are marginal resources until about 2030 after which it would require green-field or renewable Independent Power Purchases (IPPs). The estimates of green-field IPP plant gate prices are adjusted for line losses. Depending on the amount of liquefied natural gas (LNG) load it ultimately serves and whether other load growth occurs as expected, the energy LRMC outlook is \$85 per megawatt hour (MWh) to \$100 per MWh from 2017 to 2030.³⁰

BC Hydro's Evidentiary Update on the LRB and LRMC revises the estimate of energy LRMC to \$85/MWh (in \$F2013; \$87/MWh in \$F2016) because the need for new resources has reduced and the price outlook for marginal resources has dropped since the 2013 IRP.³¹ BC Hydro argues that since 2003, its LRMC "...has been the benchmark against which BC Hydro's marginal conservation rates are measured." The reduction in the energy LRMC estimate raises issues of the degree to which BC Hydro's conservation rates ought to be maintained, and the degree to which BC Hydro's marginal conservation rates (RIB Step 2, MGS and LGS Part 2 and TSR stepped rate Tier 2) should strictly adhere to BC Hydro's current estimate of LRMC.³²

BC Hydro's estimate of energy LRMC does not include any generation or network capacity costs, consistent with previous Commission decisions regarding the appropriate LRMC referent for Step 2 of the RIB rate.³³ The capacity LRMC continues to be based upon the cost of Revelstoke Unit 6 and remains at \$50 to \$55/kW-year (\$F2013).³⁴ The addition of a generation capacity value to the energy LRMC could increase the LRMC for the RIB

²⁵ Exhibit B-1, p. 2-46.

²⁶ Exhibit B-5, BCUC IR 1.41.1.

²⁷ Exhibit B-17, p. 3.

²⁸ Ibid., p. 2.

²⁹ Exhibit B-1, p. 2-48.

³⁰ Ibid., p. 2-52.

³¹ Exhibit B-17, pp. 8-9; Exhibit B-37, p. 10 of 11.

³² BC Hydro Sept 26 Final Argument, pp. 11-12.

³³ Exhibit B-23, BCUC IR 2.176.2.

³⁴ Exhibit B-17, p. 1.

rate from \$95/MWh (based on \$85/MWh in \$F2013 adjusted for distribution losses and inflated to \$2017) to \$106/MWh in \$F2017.³⁵

BC Hydro notes that there may be merit in exploring the inclusion of a generation capacity value in the energy LRM for the purpose of the RIB Step 2 rate, but there is less merit for other rates that include a demand charge, especially RS 1823 that has a time-differentiated demand charge.³⁶

For the purpose of establishing the RIB Step 2 rate, BC Hydro submits that the inclusion of generation capacity value in the energy LRM would not necessarily result in a more economically efficient price than the use of the energy-only LRM. This is because the generation capacity marginal cost is a peak-demand-based cost, not an energy cost. Signaling the cost of capacity via a non-time-differentiated energy rate would distort the capacity price signal. The uniform energy price signal would be too low at the time of peak demand and too high at all other times.³⁷

BC Hydro asserts that the measure of LRM is not a precise measure and the difference between the Step 2 rate and the high end of the LRM is quite small.³⁸ BC Hydro notes there are many other rate design objectives that may make energy price deviations from LRM prudent.³⁹ BC Hydro also submits that "... it is important to send a strong, consistent and stable signal rather than frequently adjusting the rate to match the latest estimate of the LRM."⁴⁰

Intervener arguments

CEC argues that it is important to conceive of the LRM as having a significant range and not as a single point estimate.⁴¹ CEC also submits that the evidence in this proceeding clearly shows that BC Hydro's LRB planning covers a range of potential scenarios and across this range the energy LRM would be expected to be considerably different. In consideration of these points CEC recommends the Commission recognize that the energy LRM can have a range depending upon the circumstances BC Hydro is facing and that, when assessing rate designs, the Commission take the range into consideration by ensuring the energy LRM is not used as a mechanistic determinative marker for setting rate design components.⁴²

With reference to the RIB rate, in which the Step 2 energy rate currently exceeds the upper range of BC Hydro's energy LRM, BCSEA argues that the energy LRM is an estimate and for rate design purposes should not be considered a bright line. It does not disagree with the energy referent being the Step 2 energy rate but submits it should not be considered a strict upper bound. BCSEA explains that residential customers do not have a demand charge and therefore the Step 2 rate incorporates the recovery of both energy and capacity costs; therefore the Step 2 energy rate could be grossed up to account for this capacity and even if it exceeds the upper bound of the LRM, it reflects an economically rational price signal. BCSEA also points out the energy

³⁵ Ibid., p. 9.

³⁶ Exhibit B-23, BCUC IR 2.177.2.

³⁷ Exhibit B-5, BCUC IR 1.41.1.

³⁸ BC Hydro September 26, 2016 Final Argument, p. 28.

³⁹ Exhibit B-23, BCUC IR 2.137.2.

⁴⁰ Ibid., BCUC IR 2.185.1 and CEC IR 2.111.1.

⁴¹ CEC Final Argument, pp. 40-46.

⁴² Ibid., p. 16.

LRMC does not include distribution line losses and distribution capacity costs, whereas the conservation induced by the Step 2 energy rate does partially offset these costs.⁴³

CEBC argues that the updated LRMC value is significantly overstated. It argues that BC Hydro's updated LRMC ignores likely future reductions in Greenfield wind and solar costs. Further, it argues the updated LRMC value is supposedly based, at least in part, on the cost of DSM programs, but the logic is circular, in that the cost of DSM is used to establish the LRMC, but the \$85/MWh LRMC value is used as the cut-off cost for DSM programs. CEBC also argues the \$85/MWh value is a significant overstatement of the average cost of DSM programs and is a significant overstatement of the proper LRMC value; consequently the gap between the LRMC and the Tier 2 price is 'far greater' than shown, and the inefficiency of the price signal is also far greater.⁴⁴ In addition, the CEBC submits it is inappropriate to apply a capacity charge to the energy LRMC since "...the strain on the system's capacity resources is not a function of the residential customers' monthly energy usage, but is instead related to peak loads on the 4 coldest days of the year."⁴⁵ The CEBC supports severing any linkage between tiered rates and the LRMC.⁴⁶

NIARG notes that the energy LRMC derived by BC Hydro should not be applied to Zone 1B or Zone II without careful consideration, which should be deferred to Module 2 after appropriate customer engagement and subsequent information discovery process.⁴⁷

Panel discussion

The primary issue for the Panel is the degree to which the LRMC should be relied upon to provide guidance in determining an appropriate rate design for the customer classes with conservation rates.

The Panel's primary concern with the LRMC is its application in determining inclining block rate structures. In the Panel's view this includes considering it as a reference for the Bonbright energy efficiency criterion in order to encourage conservation. Of secondary concern to the Panel is whether LRMC should be identified as energy LRMC, as BC Hydro has done, or whether LRMC should include components such as generation capacity and transmission capacity, noting the debate among the parties as to whether the energy-plus LRMC would result in a more economically efficient price signal.

In the Panel's view, verification of the load resource gap or determining the reasonableness of the marginal resources in the LRB from which BC Hydro has estimated the LRMC are not at issue in this proceeding. As long as BC Hydro's approach to estimating LRMC is consistent with its approach in the Lieutenant Governor in Council-approved 2013 IRP, the Panel accepts that the estimate in the Evidentiary Update should be used for the purpose of being a reference for economic efficiency.

The Panel notes CEC's submission that it is important to consider LRMC values as something representing a range of potential costs and not a single point. The Panel does not disagree with CEC given that estimates of

⁴³ BCSEA Final Argument, p. 16.

⁴⁴ CEBC Final Argument, pp. 4-6.

⁴⁵ Ibid., p. 4.

⁴⁶ Ibid., p. 9.

⁴⁷ NIARG Final Argument, p. 2.

LRMC may vary over time. However, for the purpose of providing a basis for the Step 2 rate for RIB and TSR, either a range (\$85/MWh to \$100/MWh) or a point (less than \$85/MWh) can be used as a reference for both the TSR and the RIB rate. For the TSR, Direction No. 7/ Heritage Contract Report Recommendation #8 requires the Commission to ensure the Tier 2 rate *reflects* the cost of new supply. For the RIB rate, the 2008 RIB Decision determined that the Tier 2 rate *should reflect* the LRMC. Neither of these requires that the Step 2 rate exactly equals the LRMC but does imply that it should be at or reasonably close to the LRMC.

The Panel notes that the LRMC was facing increasing pressures at the time of the 2013 IRP but it may now be declining as BC Hydro's new supply resources are now in place. This trend could be interpreted to indicate a need to reduce Tier 2 pricing in excess of this amount to reflect this reduction. The Panel disagrees. BC Hydro has outlined how efficiency, conservation and other rate design objectives for inclining block rate structures may make energy price deviations from LRMC prudent. Therefore, we accept BC Hydro's position with reference to MGS and LGS rate classes that a reliance on LRMC pricing is not a requirement for a decision with respect to efficiency and will specifically rely on it only where required by government direction. In other cases, the Panel will rely on the LRMC to provide guidance in setting Tier 2 rates but not as a strict determinant.

The Panel acknowledges the merits on both sides of the debate on including capacity costs to the energy LRMC, especially for the rate design of the residential customer class. The addition of the capacity cost will increase the LRMC that is used as a reference for Step 2 energy rates. The Panel agrees with BC Hydro that inclusion of generation capacity value in the energy LRMC would not necessarily result in a more economically efficient price than the use of the energy-only LRMC and believes there is merit in maintaining a consistent mechanism rather than changing the method for calculating the LRMC or adjusting the rate to match the latest estimate of the LRMC.

The Panel also acknowledges the submissions of CEBC with regard to the relationship between LRMC and the average cost of DSM programs. However, the relationship between LRMC and DSM is not within scope of this proceeding.

2.2 Bonbright principles

BC Hydro states its rate design proposals are evaluated in accordance with eight generally accepted rate design criteria, which are derived from *Principles of Public Utility Rates* by James C Bonbright.⁴⁸ BC Hydro described these criteria to stakeholders at Workshop 1 and grouped them into one of four categories: (i) economic efficiency; (ii) fairness; (iii) practicality; and (iv) stability. It also proposed ways to apply the criteria to rate structures generally.⁴⁹

BC Hydro sets out the eight Bonbright criteria in Table 2-7 of the Application, along with the category groups and BC Hydro's proposed measures for applying the criteria to rate structures.⁵⁰ The Bonbright criteria by category groupings that BC Hydro uses in the Application are as follows:

- Price signals that encourage efficient use and discourage inefficient use (economic efficiency);

⁴⁸ Exhibit B-1, p. 1-20.

⁴⁹ Ibid., p. 2-56.

⁵⁰ Ibid., pp. 2-57, 2-58.

- Fair apportionment of costs among customers (fairness);
- Avoid undue discrimination (fairness);
- Customer understanding and acceptance, practical and cost effective to implement (practicality);
- Freedom of controversies as to proper interpretation (practicality);
- Recovery of the revenue requirement (stability);
- Revenue stability (stability); and
- Rate stability (stability).

BC Hydro believes there is value in prioritizing some Bonbright criteria over others in the context of the overall RDA. BC Hydro states: “While the application of the Bonbright criteria may vary depending on the rate structure being examined (e.g., the application of the Bonbright efficiency criteria would be different in a transmission extension policy context as compared to a default rate structure context), where a tradeoff is required the weight should be given to the prioritized criteria....”⁵¹

For the current Application, BC Hydro has reprioritized the Bonbright criteria from that relied upon in the 2007 RDA. In the 2007 RDA, BC Hydro prioritized the following Bonbright criteria: customer understanding and acceptance (simplicity), fair apportionment of cost among customers, and efficiency. For the 2015 RDA Module 1, BC Hydro prioritizes the following three Bonbright criteria:

- Customer understanding and acceptance, practical and cost effective to administer;
- Stable rates for customers; and
- Fair apportionment of costs among customers.⁵²

A number of factors underpin the 2015 RDA prioritization: (i) Reduced Forecasted Need/Self-Sufficiency; (ii) Reduced LRMC; (iii) Government Policy; and (iv) Changing Customer Expectations/Stakeholder Engagement.⁵³

BC Hydro notes that during the IR process and at the oral hearing, a number of parties commented on BC Hydro’s change in prioritization of the Bonbright criteria and specifically, the absence of “efficiency” as one of the top principles in terms of priority. BC Hydro submits that its prioritization of the Bonbright criteria should reflect the utility’s situation at the time of the particular rate design initiative. As such, BC Hydro submits that prioritization should and in fact is expected to change over time.⁵⁴

BC Hydro states that it further discusses the weighting of the Bonbright criteria in the context of the individual rate proposals.⁵⁵ For example, the RIB rate is evaluated not only against the three prioritized criteria but also against the criterion of economic efficiency – price signals that encourage efficient use and discourage inefficient

⁵¹ Exhibit B-5, BCUC IR 1.6.4.

⁵² Exhibit B-1, p. 1-20, Table 1-2; Exhibit B-5, BCUC IR 1.6.1.

⁵³ Exhibit B-5, BCUC IR 1.6.1.

⁵⁴ BC Hydro September 26, 2016 Final Argument, p. 15.

⁵⁵ Exhibit B-1, p. 2-62.

use.⁵⁶ BC Hydro proposes that the Bonbright efficiency criterion when used to evaluate rate structures generally be measured by reference to the energy LRMC and to total GWh of conservation.⁵⁷

BC Hydro also states that, although efficiency is one of its rate design objectives, it has prioritized customer understanding and acceptance, practicality and fairness over efficiency in the RDA, with the emphasis on each factor reflecting the different characteristics among the different customer classes. This is reflected in its proposals to simplify the MGS and LGS rate structures. BC Hydro also describes situations where sending efficient LRMC price signals might not elicit a corresponding efficient decision by customers.⁵⁸

Intervener arguments

MoveUP comments that BC Hydro has declined to prioritize efficiency as one of the top principles of the Bonbright criteria used to evaluate this RDA. MoveUP argues that energy efficiency is a core British Columbian value, and it cannot endorse abandoning efficiency as a top priority.⁵⁹

During the consultation phase, the AMPC commented that “In order to begin to redress the rate design imbalance of previous years, and to return to the well accepted and balanced approach of Bonbright, it is important that BC Hydro’s narrow interpretation of efficiency be replaced by a broader understanding of efficiency, and that the rate design principles of fairness, rate stability, and customer understanding be given significantly more weight than previously.”⁶⁰

BCSEA argues that conservation and efficiency are important regardless of whether BC Hydro is long or short on energy or capacity and whether this position is in the short, medium or long term. BCSEA states it does not object to reprioritization of the Bonbright principles, but emphasizes that its understanding of BC Hydro’s prioritization of the Bonbright principles in this Application does not imply abandonment of the “efficiency” principle.⁶¹

BC Hydro reply argument

In its reply BC Hydro states it has not abandoned the efficiency criterion in its consideration of the proposals it has put forward, but carefully considered each rate design criterion in the evaluation of its proposals and, where conflicts arose, prioritized the three identified rate design criteria over others. BC Hydro did this for a number of reasons: its circumstances have changed considerably since 2007; there was strong stakeholder support for BC Hydro’s prioritization of the three identified criteria; and, the BC government has placed a focus on rate impacts. BC Hydro submits that its prioritization of rate design criteria for the 2015 RDA was and remains reasonable and appropriate.⁶²

⁵⁶ Exhibit B-1, p. 5-30, Table 5-7.

⁵⁷ Ibid., p. 2-57, Table 2-7.

⁵⁸ Exhibit B-23, BCUC IR 2.175.1.

⁵⁹ MoveUP Final Argument, pp. 2-6.

⁶⁰ Exhibit B-1, Appendix C-1B, p. 100 of 115.

⁶¹ BCSEA Argument, pp. 4-6.

⁶² BC Hydro Reply Argument, p. 6.

Panel discussion

The Panel understands that BC Hydro's intent in prioritizing the Bonbright principles is a reflection of the utility's situation at the time of this rate design proceeding. The Panel agrees that prioritization can be expected to change over time as circumstances change and current government policy and other factors underpin the need for reprioritization of the principles in this instance. The change in the province's forecast need and self-sufficiency requirements, the reduced LRMC (as discussed in section 2.1 of this decision), certain government policy statements and its focus on conservation rates, and changing customer expectations and understandings all need to be reflected in prioritizing Bonbright principles.

The Panel also agrees with BCSEA and BC Hydro that reprioritization of the Bonbright principles does not equate to abandonment of the efficiency criterion. For example, the Panel notes that one of the reasons BC Hydro maintains the RIB rate as status quo is because the rate structure appears to be achieving its overall objective of encouraging conservation through customer response to higher marginal prices at the Step 2 energy rate.⁶³ In the Panel's view, in assessing the rate design proposals for the various customer classes it is important to consider the efficiency criterion in balance with other principles.

2.3 Bill neutrality vs revenue neutrality

In the Application, BC Hydro introduces two types of revenue neutrality: customer bill neutrality, which is used in the context of baselines and unique to RS 1823, and forecast revenue neutrality, which is used for all other rate class designs.⁶⁴ In Workshop 5, BC Hydro defined the two types of revenue neutrality as follows:

Customer Bill Neutrality: If the RS 1823 customer does not change its usage relative to its customer baseline, the customer's bill remains unchanged.

Forecast Revenue Neutrality: target revenue is calculated by the forecast load multiplied by the previous year's rates and the RRA rate increase.⁶⁵

BC Hydro explains that revenue neutrality was the subject of a year and half of stakeholder engagement.⁶⁶ It is BC Hydro's view that a determination on the definition of revenue neutrality may reduce the flexibility BC Hydro has in pricing RS 1823 energy rates given Direction No. 7 and other legislative constraints.⁶⁷ It also submits the term revenue neutrality is not defined in Recommendation #8 of the Heritage Contract Report and as such RS 1823 design can be done either on the basis of customer bill or forecast revenue neutrality.⁶⁸

BC Hydro submits that RS 1823 was designed to be customer bill neutral. Customer bill neutrality was agreed to by all stakeholders under the terms of the NSA for BC Hydro's TSR Application filed in March 2005 and it was used in BC Hydro's TSR Re-pricing Application in February 2008. BC Hydro submits that a determination on revenue neutrality may provide certainty regarding future rate designs, but it may limit feasible rate options. BC

⁶³ Exhibit B-1, Appendix C-3B.

⁶⁴ Ibid., pp. 7-12 – 7-13.

⁶⁵ Ibid., pp. 7-12 - 7-13.

⁶⁶ Transcript Volume 1, p. 32.

⁶⁷ Exhibit B-5, BCUC IR 1.91.1.

⁶⁸ Exhibit B-1, p. 7-7.

Hydro is also of the view that each rate design should be examined on its own allowing trade-offs to be made, including any assumptions regarding revenue neutrality. BC Hydro notes that this is consistent with the approach used in previous rate design filings.⁶⁹

Intervener arguments

CAPP agrees with BC Hydro and supports the continued use of bill neutrality as the definition of ‘revenue neutral’ for RS 1823.⁷⁰

AMPC submits that “Any debate about the form of revenue neutrality that should apply in setting RS 1823 is virtually academic (the amounts distinguishing customer bill from forecast revenue neutrality are immaterial) and the views of affected customers should therefore prevail.”⁷¹

BCOAPo submits that the current definition of revenue neutrality based on bill neutrality is problematic. BCOAPo explains that if forecast customer use for the purpose of rate-setting is less than its customer baseline, there is no true revenue neutrality and other customers classes will pay to make up for the shortfall in revenue. BCOAPo argues that defining revenue neutrality according to the forecast revenue neutrality approach aligns with the revenue neutrality definition used for all other classes. In principle, BCOAPo prefers forecast revenue neutrality. However, given the minor differences in revenues, \$0.4 million to \$0.5 million per year, BCOAPo accepts the customer bill neutrality definition.⁷²

CEC submits that having different definitions of revenue neutrality is not necessarily appropriate and argues it would be preferable if the definition were consistent across rate schedules.⁷³ However, CEC explains that the increased price responsiveness of industrial customers reinforces the value of a conservation rate structure as well as the use of the ‘bill neutrality’ definition but the impacts are not especially onerous for customers in the other rate classes. As such, the CEC recommends that the Commission accept the proposed BC Hydro definition of revenue neutrality for the transmission class at this time.⁷⁴

Panel discussion

The Panel agrees with BC Hydro that the term revenue neutrality is not defined in Recommendation #8 of the Heritage Contract Report and RS 1823 design can be applied on the basis of forecast customer billing or forecast revenue neutrality. The question for the Panel is whether there is a need or a requirement to be consistent in the use of revenue neutrality definitions among all rate classes. BC Hydro has designed rates based on forecast revenue neutrality for all rate classes other than RS 1823, which was specifically designed to be customer bill neutral. Although there are benefits to establishing a consistent definition of revenue neutrality for all classes as it may provide certainty in future rate designs, doing so may also limit future rate design options.

⁶⁹ Exhibit B-5, BCUC IR 1.91.1.

⁷⁰ CAPP Final Argument, p. 3.

⁷¹ AMPC Final Argument, p. 1

⁷² BCOAPo Final Argument, pp. 15-18.

⁷³ CEC Final Argument, p. 132.

⁷⁴ Ibid., p. 132.

Continuing with customer bill neutrality is consistent with previous decisions and the billing impacts are relatively minor. Therefore, the Panel considers it appropriate to continue to allow the use of bill neutrality for RS 1823 and finds no reason to make a firm determination on the definition of revenue neutrality and unnecessarily restrict BC Hydro's future rate design options.

3.0 RESIDENTIAL RATES

3.1 Residential inclining block rate

3.1.1 Background

The RIB rate is the default residential rate (RS 1101/1121) with 1.7 million residential rate class accounts who consumed 16,459 GWh in 2015. The RIB rate was approved by Commission Order G-124-08 and made effective on October 1, 2008. The RIB rate is described as a two-step inclining block rate with a basic charge and is designed as a conservation rate, which demonstrates to residential customers the cost of new electricity supply, and offers an incentive to reduce consumption. The Commission determined that BC Hydro's LRMC was appropriate to denote the Step 2 energy rate. The Step 1 energy rate and the basic charge are calculated on residual amounts and designed to achieve bill neutrality. The Commission established the Step 1/Step 2 threshold at 1,350 kWh which is near 90 percent of the median consumption of BC Hydro residential customers per two month period.⁷⁵

In order to evaluate the impacts and customer response to the RIB rate, net of DSM programs and natural conservation, the 2013 RIB Evaluation Report covering the period 2009 through 2012 was created. Some of the findings that are germane to this proceeding are as follows:

- Large consumers have higher elasticity (higher average response to higher prices) than smaller consumers;
- Higher consumption customers have higher awareness of RIB;
- A total of 50 percent of residential customers appear to be aware of the RIB rate; and
- The total household electricity bill amount serves as the greatest incentive for consumers to manage electricity consumption followed by electricity prices.

The evaluation report also made three recommendations for future work as follows:

1. Efforts to estimate Step 1 price elasticity should be continued as future evaluations will be aided by the accumulation of data and price variation over time.
2. Complimentary econometric analysis of a select sample of customers will benefit future RIB rate evaluations.
3. BC Hydro should consider ways to increase RIB rate awareness with a focus on customer segments that have shown the largest response to price.⁷⁶

⁷⁵ Exhibit B-1, pp. 5-3-5-7.

⁷⁶ Ibid., pp. 5-16-5-19.

3.1.2 BC Hydro RIB rate proposal

BC Hydro proposes to retain the status quo with respect to the RIB rate structure that has been in place since 2008. Specifically, this proposal contemplates no change to the Step 1 or Step 2 thresholds, the ratio between them or the basic charge for 2017 through 2019. In addition, because the status quo is to be maintained, BC Hydro asserts that no final order is required in this regard. BC Hydro also proposes to maintain the current RIB Pricing Principles and apply uniformly any RRA rate increases to Step 1, Step 2 and the basic charge. The Panel must determine whether there is evidence to support making any change to the RIB rate and whether to approve the RIB Pricing Principles which have been previously approved on an interim basis.

RIB rate

BC Hydro states it has looked at alternatives to the RIB rate including a flat rate, various three-step rates, a customer specific baseline rate and two seasonal alternatives. Each of these options were put before participants in Workshop 3 and discussed in detail. BC Hydro reports, as a result of this process, there was general agreement among the parties to eliminate three options from further consideration; the customer specific baseline rate and the two seasonal options. It was agreed that adoption of the customer specific baseline rate would impose significant implementation challenges due to the scale and was viewed as impractical by participants. Further it was agreed the Seasonal 1 option, which increased the Step1/Step 2 threshold in winter, was misaligned with BC Hydro's peak period cost causation and would result in some customers facing lower winter rates. The Seasonal 2 option, where residential customers pay more in winter and less in summer, was considered a "blunt instrument" to achieve winter peak savings resulting in higher bill impacts to those who already have high bill impacts. Given these issues, BC Hydro elected to eliminate these three options rather than carry them forward for further analysis.⁷⁷

BC Hydro chose to model a revenue neutral flat rate noting that this rate is more efficient economically. However, this option would result in a loss of conservation benefits and have significant bill impacts to customers. Conservation savings would likely be reduced due to the fact that most customers would face a reduction in their marginal price relative to the RIB rate. With respect to customer bill impacts, under a flat rate bills would go up for most customers (70 percent and 41 percent would experience bill impacts greater than 10 percent and 20 percent) with only 18 percent better off under this rate.⁷⁸

BC Hydro also modelled three options for a three-step rate. BC Hydro states it expects little incremental conservation with the introduction of such rates with an expected decrease in customer understanding and acceptance. Participants agreed that only one of the options, Three Step A, should be considered in the 2015 RDA but also agreed that this option was inferior to the RIB rate.⁷⁹

BC Hydro conducted a Bonbright assessment of the RIB rate and presented it to stakeholders at Workshop 9a. In BC Hydro's view, the key Bonbright principles to be concerned with were Economic Efficiency, Fairness, Practicality and Stability. With respect to economic efficiency BC Hydro considers the RIB rate to be economically efficient and also exposes residential customers to a price signal which has been set in reference to

⁷⁷ Exhibit B-1, pp. 5-20-5-21.

⁷⁸ Ibid., pp. 5-22-5-23.

⁷⁹ Ibid., pp. 5-25-5-29.

the energy LRMC. In terms of fairness, BC Hydro judges the two step thresholds to be “generally reflective of typical Residential customer consumption on an on-going, stable basis.” Moreover, 45 percent of customer-related costs are recovered through the basic charge, which is similar to other jurisdictions. From the standpoint of stability and practicality, BC Hydro states that the simple two step RIB rate has been in place since October 2008, and sends a clear price signal that both higher consumption costs more and conservation reduces your bill. BC Hydro rated all of these principles at a “Good” performance rating and most stakeholders agreed with this assessment and support the RIB rate when compared to other alternatives.⁸⁰

In BC Hydro’s view, the stakeholder consultation process confirmed there was general agreement that continuation of the RIB rate was preferential to any alternative. In support of this BC Hydro points out that of the parties making opening statements, BCSEA, AMPC and BCOAPO all supported continuation of the RIB rate as the default residential rate.⁸¹

RIB rate principles

BC Hydro identified and reviewed four alternative means of delivering the RIB rate:

- Whether to apply the same increase to all pricing components or whether to vary the rate of increase among the pricing components;
- Whether to adjust the level of the RIB basic charge cost recovery of customer-related costs;
- Whether to implement a separate minimum charge to reflect the cost of customers remaining connected to the system during times of very low consumption or dormancy; and
- Whether to adjust the existing Step 1\Step 2 threshold.⁸²

1. Application of increases to RIB rate pricing elements

In addition to the option of applying RRA increases equally to all three RIB pricing elements, BC Hydro also looked at applying the increases to the basic charge and Step 1 rate only. This second option resulted in narrowing the differential between Step 1 and Step 2 over time. BC Hydro favours applying increases equally to all three RIB pricing elements and argues its evidence demonstrates that under the second option there would be a forecast loss of conservation with higher bill impacts for most customers (including low income customers).⁸³

2. Adjust the level of cost recovery of the basic charge

BC Hydro proposes no increase to the basic charge cost that currently recovers 45 percent of customer-related costs. BC Hydro chose not to recommend increasing the basic charge in spite of the fact it would provide a closer relationship between fixed cost elements and rate elements because customer bill impacts would be higher for low use customers (including low-income customers) if the rate were increased. On the other hand, if it were

⁸⁰ Ibid., pp. 5-29-5-31.

⁸¹ BC Hydro Final Argument, pp. 20-25.

⁸² Exhibit B-1, p. 5-33.

⁸³ Ibid., pp. 5-35-5-39.

decreased, the relationship between the basic charge and fixed costs would be diminished. BC Hydro points out that the basic charge is in the range of other Canadian utilities and argues the basic charge should remain the same.⁸⁴

3. Implementation of a minimum charge

Order G-13-14 directed BC Hydro to recover some portion of the cost for ratepayers remaining connected to the system during periods of low or no consumption. Currently, BC Hydro considers the basic charge to be the minimum charge for residential service. BC Hydro states that it tested the idea but determined it would be unable to precisely target a minimum charge to improve cost recovery from low or no use accounts and, in addition, the charge would impact 1.5 percent of customers, 50 percent of whom were low-income customers.⁸⁵

4. Step1/Step 2 threshold

BC Hydro recommends no change to the existing Step1/Step 2 threshold. Based on seven years of consumption data, the current threshold of 675 kWh at 90 percent of the monthly median consumption reflects typical residential use.⁸⁶

Intervener arguments

Overall, BCSEA supports BC Hydro's proposal to maintain the status quo for the RIB rate. Specifically, BCSEA agrees with both the threshold for moving from Step 1 to Step 2 (675 kWh per month) and the ratio for Step 1 and Step 2 pointing out that it achieves measurable energy savings through conservation and efficiency. BCSEA supports BC Hydro's status quo RIB rate elements and its pricing principles for the following reasons:

- The existing parameters work well;
- Customers understand it;
- Any change will result in either positive or negative bill impacts with no clear conservation benefits; and
- Any changes would be misperceived as the source of the affordability problem.⁸⁷

BCSEA also supports BC Hydro's position concerning changes to the RIB rate principles. With respect to the application of increases to RIB pricing elements, BCSEA states it prefers Option 1 where there is an equal percentage applied to each of the pricing elements as favoured by BC Hydro. It also agrees with BC Hydro with respect to changes in the basic charge pointing out that increasing it would reduce the energy price signal thereby diminishing the rate design and natural conservation effects.⁸⁸

⁸⁴ Ibid., pp. 5-41-5-42; BC Hydro Final Argument, pp. 26-27.

⁸⁵ Ibid., pp. 5-42-5-43.

⁸⁶ Ibid., pp. 5-43-5-44.

⁸⁷ BCSEA Final Argument, pp. 7-9.

⁸⁸ Ibid., pp. 17-18.

BCOAPO supports maintaining the status quo RIB rate as proposed by BC Hydro. BCOAPO also agrees that the RRA rate increase should be applied equally to all three pricing components noting this is preferential from a billing perspective for most residential customers.⁸⁹

CEBC believes that the RIB rate is no longer doing an effective or efficient job pointing out that incenting conservation is accomplished through general rate increases and particularly by future rate increases. CEBC submits that based on BC Hydro's application, it is apparent that households of four or more use significantly less electricity per person than households of two or one and without some household size adjustment, the current RIB is penalizing the more efficient customers. Further, BC Hydro's LRM of \$85 is already below the Tier 2 RIB rate and the gap is expected to continue to expand. CEBC asserts this indicates a growing problem with the inefficiency of the price signal and in its view the "intent of the conservation rate should not be to greatly over-induce customers to make investments in efficiency that are excessively expensive, or to induce them to make these investments far earlier than needed." CEBC argues that "if BC Hydro abandons efficiency as one of the priority goals of this price signal mechanism, as it apparently intends to do, then that over-inducement will be the result" and recommends returning to a single flat rate for residential customers.⁹⁰

CEC submits that the current RIB rate is performing adequately in terms of effectiveness and customer awareness and is satisfied initiatives are underway to increase awareness levels further resulting in more customers acting on the price signal. With respect to BC Hydro's examination of alternatives, CEC makes the following comments:

- It is opposed to a flat rate because it would result in lower conservation with only a small number of customers having lower bill impacts.
- It is opposed to three-step rates because they are excessively complicated and there is no evidence they produce better results than a two-step rate.
- Potential seasonal rates deserve additional review and CEC recommends they be carried forward to Module 2.

CEC favours the BC Hydro proposal to apply rate increases equally to all three RIB pricing elements noting that it "has the effect of mitigating the impact of the rate increase to lower use customers by spreading it more evenly to customers based on their usage. Further, it considers there to be no need to adjust the Step1/Step 2 threshold or differential noting it would result in uneven disruption in customer rates depending on how this was done. However, it disagrees with BC Hydro concerning changes to the basic charge. CEC believes the basic charge should increase over time to recover an amount greater than the current 45 percent of customer costs. CEC submits that it is important that low use customers, especially those on BC Hydro peak, contribute to costs they create. However, it also submits that a separate minimum charge is an unnecessary complication as long as there are appropriate increases to the basic charge in the future."⁹¹

MoveUp takes no position with respect to BC Hydro's status quo rate design proposal.

⁸⁹ BCOAPO Final Argument, pp. 6-7.

⁹⁰ CEBC Final Argument, pp. 3-5.

⁹¹ CEC Final Argument, pp. 74-80.

NIARG supports BC Hydro's proposal to maintain the status quo RIB rate with continuation of the current existing Zone 1B RIB rate exemption and asks the Commission to confirm this. In addition, it agrees that the Commission should approve the RIB rate pricing principles in F2017 through 2019.⁹²

No other intervener made submissions with respect to BC Hydro's status quo rate design proposal. BC Hydro notes that it has not sought an order with respect to Zone 1B pointing out they are within the scope of Module 2 along with other NIA rates.

BC Hydro reply argument

BC Hydro states that in paragraphs 48-49 of its final argument it addresses the evidence regarding the effectiveness of the RIB rate and it is overwhelmingly positive. In paragraph 49 of its final argument, BC Hydro summarizes its evidence. Some of BC Hydro's key points of evidence are as follows:

- The majority of residential customers are now aware of the RIB rate structure. A 2014 survey showed that there is 55 percent awareness;
- Almost 80 percent of residential customers aware of the RIB rate reported that it serves as an incentive to manage their electricity consumption;
- Large consumers have higher elasticities than smaller consumers and, specifically, show a substantially higher than average response to higher prices;
- Many aspects of the RIB rate, including total bill, Step 2 price and threshold, are motivating to BC Hydro's residential customers;
- A movement away from the RIB rate to a flat rate would see significant bill impacts to 70 percent of BC Hydro's low income customers.

BC Hydro argues that CEBC's arguments fail to substantially address the above evidence.⁹³

Commission determination

RIB rate

The Panel notes that BC Hydro has completed a comprehensive review of the RIB rate utilizing workshops and surveys where participants were provided with customer response information and had the opportunity to examine other potential alternatives. Based on this review BC Hydro has proposed that the RIB rate structure introduced in 2008 be maintained. The Panel agrees and notes that this position is largely supported by BCSEA, BCOAPO, NIARG and CEC who are all in support of maintaining the status quo with none of them providing definitive support for the alternatives examined. In our view the evidence presented clearly suggests that the RIB rate approach is well known and is working reasonably well as the majority of customers are aware of it and report that it creates an incentive to conserve energy.

⁹² NIARG Final Argument, pp. 3-4.

⁹³ BC Hydro Reply Argument, pp. 7-9; BC Hydro Final Argument, pp. 23-24; Transcript Volume 5, p. 923; Exhibit B-1, Appendix C-3B, pp. 112, 135--140 of 609; Exhibit B-1, pp. 5-17, 5-23.

CEBC takes the position that the rate is no longer doing an effective or efficient job and recommends a return to a single flat rate. The Panel notes that BC Hydro has addressed this in its evidence as the move to a flat rate would likely result in a reduction in conservation benefits and an increase in billing rates for most customers. Further, none of the customer groups who commented supported this approach. The Panel considers a move to a flat rate to be a step backward as it does not send the right price signal and the magnitude of projected bill increases makes it highly undesirable. Moreover, the Panel agrees with BC Hydro that CEBC has provided no evidence supporting its assertion that the RIB rate is not working. On the contrary, BC Hydro's 2013 RIB Evaluation Report suggests that the RIB rate appears to be achieving its overall objective of encouraging conservation through customer response to higher marginal prices at the Step 2 energy rate.⁹⁴

As noted, the BCUC RIB Report proceeding is underway and will provide the provincial government with additional information to assess the impact of the RIB rate.

Given this proceeding and the evidence presented, the Panel is persuaded that the most appropriate course of action is to maintain the RIB rate as proposed by BC Hydro with no changes at this time.

RIB rate principles

BC Hydro has reviewed its RIB rate principles and submits the following:

- Price increases should be applied equally to all three RIB pricing elements;
- The current basic charge cost should be maintained;
- There should be no minimum charge in addition to the basic charge; and
- The current Step1/Step 2 thresholds are to be maintained.

None of the interveners expressed concern with BC Hydro's proposal for RIB rate principles although CEC noted that it favoured an increase over time to the basic charge to recover greater than the current 45 percent of customer costs.

The Panel approves the RIB rate principles as outlined by BC Hydro and summarized above.

Having price increases applied equally to all RIB pricing elements ensures the differential between Step 1 and Step 2 rates remains and will not narrow. The Panel considers this to be more appropriate than applying price increases to only the basic charge and Step 1, as over time this would narrow the gap between Step 1 and Step 2 with potentially less incentive for energy conservation.

The Panel notes that increasing the basic charge will result in a closer relationship between fixed costs and rate elements but it will also result in higher costs for low use customers. If the basic charge were decreased the opposite would occur with a diminished relationship between fixed costs and the basic charge. The Panel sees the issue as one of balance and does not consider there to be a compelling case for change as the basic charge is currently in a range similar to other Canadian utilities. The same is true for the establishment of a minimum

⁹⁴ Exhibit B-1, Appendix C-3B.

charge in addition to the basic charge. The Panel considers the current basic charge to be the minimum charge and notes there was no compelling evidence in terms of there being substantive benefit to creating a minimum charge in addition to the basic charge.

The Step1/Step 2 thresholds have remained unchanged since the RIB rate was introduced and none of the parties recommended it be changed. BC Hydro notes that the current Step 1 threshold of 675 kWh is 90 percent of median monthly consumption levels and reflects typical use. The Panel considers this amount is reasonable to continue to encourage energy conservation over the near term and is satisfied that BC Hydro's proposal to leave the thresholds unchanged is appropriate.

3.2 E-plus residential rates

3.2.1 Background

BC Hydro has applied to modify RS 1105 also referred to as the residential E-Plus rate. The residential E-Plus rate is a non-firm discounted rate designed to market surplus energy that would have otherwise been spilled due to the lack of consistent access to the spot market at that time. The rate was first offered to new customers in 1987 and subsequently closed to new customers in 1990. In its 2007 RDA Decision, the Commission put further restrictions on RS 1105 by amending the Availability clause and making the E-Plus rate available "only in premises where there has been no change in customer since April 1, 2008." This, in effect, restricted the ability to transfer the E-Plus rate along with the sale of a property to new owners and promoted attrition.⁹⁵

E-Plus customers pay a discounted rate for space and water heating loads on the condition they have an alternative fuel back-up heating system. The size of the discounted rate was to be at most two-thirds of the regular electrical tariff. This is supported in EPHG evidence, which quotes the BC Hydro Electric Plus Homeowners Guide (January 1989) as follows: "Our obligations – The special low Electric Plus rate is expected to remain fixed until March 31, 1991. After that we will keep the Electric Plus rate at least one third lower than the firm electric rate, subject to BC Utilities Commission concurrence." In the 2007 RDA Decision the Commission affirmed that BC Hydro's statement in its E-Plus Homeowners Guide was not binding on the Commission.⁹⁶

Currently there are approximately 7,500 E-Plus customers who remain on the RS 1105 rate. Residential E-Plus customers represent only a small part of residential revenue (approximately \$4.7 million of \$1.9 billion in 2014). BC Hydro reports that the 2016 median annual energy charge for an E-Plus customer is \$1,460 and estimates that if they were under RIB rate this amount would increase to \$2,140. BC Hydro estimates the conversion cost to a typical E-Plus customer ranged between \$1,300 and \$2,800 and estimated savings realized by an E-Plus customer from 1987 to 2007 was \$6,410. BC Hydro estimates the average annual attrition to be 513 and E-Plus will naturally terminate in about 20 to 25 years.⁹⁷

While E-Plus service is non-firm and interruptible, BC Hydro reports it has never interrupted E-Plus load. BC Hydro asserts that Special Condition 1 of RS 1105 restricts BC Hydro's right to interrupt the supply of energy noting that there must be "surplus hydro energy" and "the service cannot be provided economically from other

⁹⁵ Exhibit B-1, pp. 5-48-5-49; Commission Order G-130-07.

⁹⁶ Ibid., pp. 5-48-5-50; Exhibit C10-4, p. 19.

⁹⁷ Exhibit B-23, BCUC IR 2.146.3, 2.146.5; Exhibit B-1, pp. 5-49-5-52 and Appendix C-3B, p. 89, Slide 29.

energy sources.” This differs greatly from more typical interruptible rate provisions where BC Hydro is only required to provide service when there is sufficient energy and capacity available.⁹⁸

As part of its customer engagement process BC Hydro sought feedback on the E-Plus rate in a letter to E-Plus customers where two options were outlined. After considering the feedback that was received, BC Hydro developed a third option. Accordingly, the three options set out for consideration in Workshop 9b were the following:

1. Maintain the status quo; maintain the E-Plus rate under the same terms and conditions;
2. Phase out the E-Plus rate and transition the remaining accounts to the RIB rate; and
3. Amend Special Condition 1 of RS 1105 to provide a practical interruptible option.

BC Hydro reports the vast number of existing E-Plus customers support maintaining the status-quo citing a variety of reasons including:

- There is a contract between BC Hydro and the customer;
- Customers invested in back-up systems that were made in good faith;
- Electricity affordability; and
- Due to the age of E-Plus customers, the closed rate will end under attrition.

The EPHG provided feedback in a letter expressing for many of the same reasons why it believes the E-Plus service should be maintained under existing terms and conditions.

Other interveners expressed views ranging from being neutral to MoveUP’s suggestion that customers be given a choice between a service that is truly interruptible and having the RS 1105 rate phased out over a reasonable time period.⁹⁹

3.2.2 BC Hydro proposal

After consideration of the options BC Hydro states it favours moving forward with Option 3 since it provides a practical interruption option by amending Special Condition 1. In reaching this conclusion BC Hydro offers the following reasons:

- Option 2 would have large bill impacts to E-Plus customers;
- The 2013 IRP identifies the need for additional capacity in 2019; and
- The proposed changes to Special Condition 1 will allow RS 1105 to be interruptible in a practical sense.¹⁰⁰

BC Hydro explains that this option could dovetail with its investigation of the viability of residential demand response initiatives through a pilot program in Sidney and North Saanich on South Vancouver Island using

⁹⁸ Exhibit B-1, pp. 5-48-5-50.

⁹⁹ Ibid., pp. 5-52-5-53.

¹⁰⁰ Ibid., pp. 5-54–5-55.

wireless load control relays on residential water heaters in participating residential customers' homes. This pilot also includes testing a three-element water heater which may also result in demand reductions.

In addition, BC Hydro considers Option 3 to be a practical option to interrupt service in response to short-term energy needs and would become one of the resources it could call upon during cold weather events. Accordingly, BC Hydro proposes amending Special Condition 1 with the following language (on an amended RS 1105): *"BC Hydro will provide electricity under this rate only to the extent that it has energy and capacity to do so. BC Hydro may, at any time, interrupt the supply of electricity under this rate schedule where BC Hydro does not have sufficient energy or capacity."* BC Hydro states that this language aligns with interruption provisions in Shore Power rates and is consistent with existing approved interruption criteria for E-Plus allowing it from time to time to interrupt the supply of energy. BC Hydro states that under Option 3, E-Plus customers would continue to receive the current discount but the rate would be truly interruptible and thus, serves a useful function.

BC Hydro envisions E-Plus becoming one of the resources that may be called upon during cold weather events it estimates at one to three each year. Based on questions it received, BC Hydro proposes the following business practices surrounding service interruption: (i) a seasonal notice would be sent out each year prior to the winter period as a reminder they are on an interruptible rate; (ii) there would be up to one weeks' notice (by auto-dialer, e-mail or written) than an interruption event is likely to occur. The interruption itself would occur by manual or automatic means or by written notice telling the customer to cease using electricity. BC Hydro is proposing to provide an interruption notice giving E-Plus customers two calendar days' notice to switch to their alternative back-up systems. Once the notice has been sent, E-Plus service will be interrupted even if the situation does not materialize. BC Hydro confirms that for large unplanned outages where the two day advance notice could not be met, there would be insufficient time to shed E-Plus customers in large enough numbers to support system sustainability and therefore, would not be interrupted.¹⁰¹

BC Hydro notes that for those with smart meters it has the ability to verify whether power was used during a period of interruption but it would not have the ability to verify the specific end-use. For those 200 customers with legacy meters they would not know whether there was usage during an interruption unless it lasted the entire billing period.¹⁰²

In conclusion, BC Hydro states "Option 3 ensures that customers who use the E-Plus rate would continue to receive the current discount, while also ensuring that the rate is truly interruptible and serves a useful function as was intended when the discount was offered."¹⁰³

Intervener arguments

Many of the parties took no position on BC Hydro's proposal for E-Plus. The exceptions to this were the EPHG, NIARG, BCSEA and CEC.

¹⁰¹ Exhibit B-1, pp. 5-53 to 5-56 ; Exhibit B-14, BCUC 43.1; Exhibit B-23, BCUC 2.142.2, 2.143.1, 2.143.6.1; 2.143.6.2 and 2.143.6.3.

¹⁰² Exhibit B-23, BCUC 2.147.4.

¹⁰³ Exhibit B-1, p. 5-55.

EPHG states it understands and accepts E-Plus as an interruptible power supply and may face curtailments in the event of legitimate supply shortages. However, it believes that BC Hydro's changes go far beyond what is necessary to make the program practically interruptible or function as intended. EPHG believes the onus is on BC Hydro to provide compelling arguments in support of its application for changes to RS 1105. In its view BC Hydro has made little attempt to justify its proposals and ignores their potential impact on E-Plus customers and the program should remain unchanged and allowed to end by attrition.¹⁰⁴

EPHG asserts that the commitments made to those joining E-Plus were that it was a permanent program and rates would never exceed two thirds of the "regular" price. Moreover, E-Plus customers would be given priority over other non-firm customers regarding interruptions and customers would be given 30 days' notice of interruptions of more than a few hours.

EPHG's evidence makes the following arguments as to why BC Hydro's proposal is unfair:

1. There are no compelling arguments for change. The proposed changes appear to be significant as EPHG understands they broaden the grounds for interruption and remove the requirement that a shortage needs to be provided from other energy sources economically.
2. BC Hydro has failed to demonstrate that it cannot currently interrupt E-Plus power.
3. BC Hydro has not adequately quantified financial considerations. BC Hydro has stated the financial impact would be \$6 million annually if E-Plus were to be ended. EPHG argues that this is based on the false assumption that existing E-Plus customers would have the same usage but at higher rates. EPHG asserts that most customers would want to move to alternate heating methods and be more reliant on their back-up systems while installing new oil or gas systems if they could afford to do so.
4. BC Hydro's application does not reflect adequate input from stakeholders and E-Plus customers. EPHG points out that no E-Plus representatives were invited to BC Hydro's workshops.
5. BC Hydro has failed to demonstrate its proposal is in the public interest while not imposing undue hardship on those effected. EPHG states that "imposing interruptions may have little more than symbolic value with no clear or defined public benefits. However, the impact on the small group mostly seniors, who comprise E-Plus customers will be severe."
6. The approach challenges the integrity of the process of BC Hydro supply and regulation in BC.¹⁰⁵

NIARG submits that the program offering \$3 - \$6 million subsidization to residential E-Plus customers should be phased out of service. NIARG submits it is based on outdated rationale and there have been nearly three decades where significant savings have been realized by residential E-Plus customers; with no offsetting system benefits, a phase out is the most appropriate option to balance competing interests.¹⁰⁶

BCSEA argues that the rate does not serve a useful function as it is now obsolete. It considers the E-Plus rate to be an implicit subsidy between residential and residential E-Plus customers amounting to between \$3 and \$6 million annually. Moreover, "BC Hydro's efforts to develop small scale, distributed capacity-focused DSM are commendable but should not be distorted by trying to turn E-Plus into something that it is not."

¹⁰⁴ Exhibit C10-4, EPHG Evidence, pp. 2-3.

¹⁰⁵ Ibid., p. 3.

¹⁰⁶ NIARG Final Argument, p. 5.

BCSEA argues that turning RS 1105 into a fully interruptible rate is not a desirable approach as it would likely be opposed by E-Plus customers and would not result in a capacity resource that has value for BC Hydro. BCSEA is of the view the Commission should either end the program by natural attrition or phase it out. In the event a phase out is determined the Commission should set a generous termination date with consideration of bill impacts and the recoupment of alternative investments. The requirement for participants to have an alternative heating system and BC Hydro's right to interrupt should be discontinued.¹⁰⁷

CEC agrees with BC Hydro's Option 3. CEC submits that BC Hydro's proposals allow for interruption on a reasonable and consistent basis with cost causation principles. Moreover, it provides an appropriate alternative for existing E-Plus customers who have invested in back-up systems while also providing a benefit to non-participant ratepayers. CEC submits it is inappropriate to continue delivering full firm electricity at reduced rates. If "the Commission does not approve BC Hydro's proposals, it is preferable to either [sic] terminate the program and gradually migrate customers to the residential RIB rate." This could be done over a 10-year period.¹⁰⁸

BC Hydro reply

BC Hydro states "the E-Plus rate as it is currently worded does not provide BC Hydro with the benefits it could because the current wording of RS 1105 frustrates the interruptible nature of the E-Plus rate." Without its proposed amendments, service interruption is unlikely and "the fact that the 'E-Plus rate does not currently serve a useful function' or that it is operationally impractical for BC Hydro to interrupt service are not reasons to reject BC Hydro's E-Plus proposal but rather, are reasons that support the amendments BC Hydro has proposed."¹⁰⁹

BC Hydro also takes issue with BCSEA's statement that turning E-Plus into a fully interruptible rate would not result in a capacity resource that has value for BC Hydro. BC Hydro asserts that none of the evidence cited by BCSEA provides a response to BC Hydro's evidence that the 2013 IRP forecasts a need for capacity in 2019 even with DSM initiative continuing.¹¹⁰

BC Hydro also takes issue with EPHG's statement that it has not justified why it wants to remove the clause in RS 1105 stating that service will only be interrupted "when the service cannot be provided economically from other energy sources." BC Hydro contends it has justified this as circumstances have changed since the E-Plus rate was introduced and the language must be modified to allow it the ability to interrupt service. BC Hydro argues that the proposed wording removes the constraints in the current language and will provide BC Hydro the flexibility to interrupt service when system capacity is required.¹¹¹

¹⁰⁷ BCSEA-SCBC Final Argument, pp. 36-37.

¹⁰⁸ CEC Final Argument, pp. 87-88.

¹⁰⁹ BC Hydro Reply Argument, p. 10.

¹¹⁰ Ibid., pp. 10-11

¹¹¹ Ibid., p. 11.

BC Hydro concludes by stating that it considered the large rate impacts as a result of E-Plus being phased out and transitioned to a RIB rate and concludes that its proposal represents a better and fairer response.¹¹²

Commission determination

The Panel has determined it is appropriate to phase out the residential E-Plus rate program over five years commencing April 1, 2017.

The issue for the Panel is whether there is justification to maintain a highly discounted rate to a small group of customers in either its current form or in a modified form as proposed by BC Hydro or whether it should be terminated and phased out as proposed by some of the participants. We have considered the evidence and the positions taken by the parties and are not persuaded the benefits justify the high level of subsidization provided by RS 1105 in either its present form or in BC Hydro's proposed modified form. However, the Panel acknowledges that this will have significant bill impacts for E-Plus customers. **Therefore, to soften the medium term financial impact on E-Plus customers, BC Hydro is directed to phase out the program over a period of five years.**

The positions taken by the parties differ substantially. BC Hydro agrees that currently the E-Plus rate does not serve a useful function and has proposed amendments to RS 1105 to allow it flexibility to interrupt E-Plus customers when system capacity is required. CEC agrees with this proposal. EPHG strongly disagrees with BC Hydro and argues that the current status quo should be maintained. NIARG and BCSEA both take the position that the E-Plus rate no longer serves a useful function citing a sizable subsidy to RS 1105 ratepayers. Neither NIARG nor BCSEA have expressed support for modifications suggested BC Hydro to allow service to be practically interrupted. NIARG has recommended and BCSEA has indicated they would support a phasing out of the program.

EPHG takes the position that the onus is on BC Hydro to provide compelling reasons for change and BC Hydro has failed to do so. The Panel disagrees. BC Hydro has reported that E-Plus customers have been receiving a highly subsidized rate since the late 1980s and never once has the service been interrupted. BC Hydro explains this is because Special Condition 1 restricts its ability to interrupt service and it is therefore impractical to do so. The Panel accepts this explanation and is of the view that maintaining the status quo, as proposed by EPHG, would result in continued subsidized savings for E-Plus customers with little or no potential benefits to the rest of BC Hydro's customers.

The Panel notes that the estimated savings from 1987 through 2007 for a median E-Plus customer was \$6,410, an amount that has continued to grow from 2007 to the present. The Panel also notes BC Hydro's response to BCUC IR 2.146.3 which stated that an E-Plus customer consuming at the median of the E-Plus class consumption has an expected F2016 annual energy charge of approximately \$1,400, in comparison to an annual energy charge of approximately \$2,140 if this same customer were fully under the RIB rate.¹¹³ Given the differential between an E-Plus customer's annual energy charge and the annual charge under the RIB rate, it appears that an E-Plus customer's annual savings in 2016 alone is estimated at close to \$700. These savings exceed the

¹¹² Ibid, p. 12.

¹¹³ Exhibit B-23, BCUC IR 2.146.3.

estimated \$1,300-\$2,800 conversion cost ranges provided by BC Hydro which none of the parties contested. Given these circumstances, the Panel concludes that a typical E-Plus customer has recovered far more in savings than what was originally expended.

BC Hydro has stated that the 2013 IRP has identified a need for additional capacity in 2019 and it could rely on E-Plus customers to be one of the resources it could call upon during cold weather events. To capture these capacity savings, BC Hydro has proposed to modify the language in Special Condition 1 to make RS 1105 interruptible in a practical sense. While the Panel accepts this may be possible, we are not persuaded this is the most practical option available to BC Hydro as it has provided no analysis of the potential benefits of alternative options which could be explored to deal with the need for additional capacity in 2019. In the view of the Panel, BC Hydro's proposal is not supported by a well thought out business analysis and is driven more by a desire to derive some benefit from a program that is outdated than an effective approach to increase capacity during key periods.

The E-Plus rate was established to market surplus energy that would have otherwise been spilled due to lack of consistent access to the spot market. This specific problem is one that does not exist today; almost 30 years later and RS 1105 no longer serves a practical purpose. While BC Hydro has attempted to make it more relevant in the current context, the Panel agrees with BCSEA in that E-Plus should not be turned into something it is not.

To reduce the immediate financial impact and spread the bill impacts to E-Plus customers over a reasonable length of time, the Panel has set a five-year period for phasing out RS 1105. **Accordingly, the Panel directs BC Hydro to submit a compliance filing within 30 days of the date of this decision which outlines a proposal for achieving the five-year phase out of the E-Plus program and results in rates being charged to E-Plus customers at the end of the five-year phase-out period which equate to other British Columbia residential customers at that time. Further, the Panel also directs BC Hydro to waive the requirement of having an alternative heating system in working order and eliminate the possibility of service being interrupted as proposed by BCSEA over this transition period.**

4.0 GENERAL SERVICE

4.1 Background

General Service customers of BC Hydro are made up of commercial and small industrial customers. These customers are categorized as follows:

- Small General Service (SGS) – billing demand of less than 35 kW;
- Medium General Service (MGS) – billing demand of between 35 kW and 150 kW or usage of less than or equal to 550,000 kilowatt hours (kWh) of electricity in any 12-month period; and
- Large General Service (LGS) – billing demand of at least 150 kilowatts (kW) or usage of more than 550,000 kWh of electricity in any 12-month period.¹¹⁴

¹¹⁴ Exhibit B-1, Appendix C-4A Workshop No. 8A page 5 of 813; Exhibit B-1, p. 6-1.

Currently, SGS customers take service under a flat rate structure whereas MGS and LGS customers take service under a two-part conservation rate structure. MGS and LGS rate structures are similar in that both have monthly historical baselines for each customer account and their Part-2 energy rates are reflective of the LRMC. However, they are also different in the following ways: LGS's Part 1 Tier 1 (higher) rate is applied to the first 14,800 kWh and Tier 2 is applied to the remaining kWh up to the customer's baseline; MGS Part 1 Tier 1 (higher) rate is applied to the last 14,800 kWh of a customer's baseline and Tier 2 to the remaining energy consumption. In short, MGS's Part 1 rate is an inversion of the LGS Part 1 rate.

In the 2007 RDA, BC Hydro proposed to evaluate savings through a randomized control trial methodology.¹¹⁵ Directive No. 3 of Order G-110-10 ordered BC Hydro to file a report within 36 months of the implementation date of January 1, 2011 to address, among other things, the value of the use of control groups for evaluation of conservation savings.

Pursuant to Section 14 of the NSA approved by Order G-110-10, Corix Multi-Utility Services Inc. (Corix) applied to the Commission for an exemption from the two-part LGS conservation rate. Pursuant to Section 13 of the NSA approved by Order G-110-10, customers who anticipate significant, permanent increases in energy consumption can apply for relief from the two-part LGS rate on a prospective basis.¹¹⁶

On December 30, 2013, BC Hydro filed its Three-year Evaluation Report with the Commission in compliance with Order G-110-10. BC Hydro also filed an evaluation report dated January 13, 2015 on LGS and MGS conservation rates covering the period April 1, 2013 through March 31, 2014 (F2014 Report). The December 2013 Evaluation Report appended to the "LGS and MGS Three-Year Report" found that the LGS rate structure resulted in energy savings of 144 GWh/year by December 31, 2011 increasing to 200 GWh/year by December 31, 2012. Actual energy savings for LGS were considerably less than forecast energy savings and there were no measurable savings for MGS.¹¹⁷ The F2014 report found, among other things, that the MGS conservation rate structure did not produce statistically significant energy savings and the LGS conservation rate structure resulted in relatively small net energy savings of 77 GWh per year in F2014 relative to calendar year 2010.¹¹⁸ The F2014 Report showed that only 35 percent of LGS customers, 26 percent of larger MGS customers and 22 percent of smaller MGS customers could correctly identify their rate structure.¹¹⁹ BC Hydro considers that the existing MGS and LGS rate structures are not performing as expected and attributes this to the complexity of and customers' limited understanding of the rate design.

¹¹⁵ Exhibit B-1, Appendix C4A, Three Year Evaluation Report, p. 575 of 813.

¹¹⁶ Order G-110-10 dated June 29, 2010 approved the Negotiated Settlement Agreement (NSA) following a negotiation settlement process to review BC Hydro's application on large general service rate design.

¹¹⁷ Ibid., Appendix C-4A, p. 565 of 813.

¹¹⁸ Ibid., Appendix C-4A, p. 409 of 813.

¹¹⁹ Ibid., Appendix C-4A, p. 43 of 813.

4.2 BC Hydro rate proposals

BC Hydro seeks the following approvals with regard to the SGS, MGS and LGS rate classes.

SGS

BC Hydro seeks approval to retain the existing flat energy rate structure for SGS and increase the SGS basic charge recovery of customer-related costs from approximately 33 percent to 45 percent on a one-time basis and a one-time offsetting reduction to the energy rate. Thereafter, the annual revenue requirement increase is applied equally to all the elements within each rate structure of the SGS rate class. BC Hydro requests that this rate structure be effective as of April 1, 2017.¹²⁰

In the Application, BC Hydro states that there is “no better alternative to the existing SGS rate. It is easy to understand and simple to administer, and generally reflects LRMC in its flat energy structure.” The impact of increasing the SGS basic charge recovery of customer-related costs from approximately 33 percent to 45 percent compared to the status quo is that the energy rate will decrease from \$11.16 cents/kWh to \$11.01 cents/kWh and the basic charge will increase from \$23.47 cents/day to \$32 cents/day.¹²¹ These expected bill impacts are considered by BC Hydro to be “minimal for the majority of SGS customers, both on a percentage and absolute basis.”¹²² BC Hydro also submits that increasing the SGS basic charge recovery “aligns with the Bonbright fairness criterion by matching embedded cost recovery in rates with cost causation.”¹²³

MGS

BC Hydro seeks approval to: (i) replace the existing MGS two-part energy rate with a flat energy rate; (ii) replace the existing three-step inclining block demand charge with a flat demand charge; and (iii) increase the demand charge recovery of demand-related costs from approximately 15 percent to 35 percent, effective April 1, 2017.¹²⁴

BC Hydro proposes a one-year transition, as opposed to a three-year phase-in which softens bill impacts only modestly. The maximum bill impact of the largest MGS customers is approximately 8 percent versus no phase-in of 10.4 percent. For a typical customer, the bill impact for phase-in is 3.2 percent versus 2.8 percent under no phase-in.¹²⁵

BC Hydro submits that the proposed “simplified rate structure aims to address two of the failings BC Hydro identified with the current MGS rate structure – customer understanding and acceptance.”¹²⁶ The current MGS two-part energy rate, in BC Hydro’s submission, does not provide a “clear price signal for conservation” and is

¹²⁰ BC Hydro Final Argument, p. 38.

¹²¹ Exhibit B-1, p. 6-10.

¹²² BC Hydro Final Argument dated September 26, 2016, p. 40.

¹²³ Exhibit B-1, p. 6-10.

¹²⁴ BC Hydro Final Argument dated September 26, 2016, pp. 41-42.

¹²⁵ Exhibit B-5, BCUC IR 1.79.2.

¹²⁶ BC Hydro Final Argument dated September 26, 2016, p. 42.

“poorly understand by customers,” which has resulted in BC Hydro being unable to detect any conservation savings to date.¹²⁷

Under the MGS proposal, with the flat demand charge maintained at a 15 percent cost recovery scenario, typical MGS customers, i.e., customers consuming between 120,000 kWh to 240,000 kWh per year with a load factor between 30 percent and 60 percent, are slightly better off than customers with low consumption and a low load factor.¹²⁸

LGS

BC Hydro seeks approval to: (i) replace the existing LGS two-part energy rate with a flat energy rate; (ii) replace the existing three-step demand charge with a flat demand charge; and (iii) increase the demand charge recovery of demand-related costs from approximately 50 percent to 65 percent, effective April 1, 2017.¹²⁹

BC Hydro states that although the new flat energy rate is well below the lower range of energy LRMC, there is no change in conservation savings, no bill impacts from flattening Part 1 energy rates, and typical customers are better off.¹³⁰ No phase-in period is proposed because it would delay the offsetting benefits of the LGS proposals in their entirety with no significant benefit related to mitigating overall bill impacts.¹³¹

Similar to BC Hydro’s proposal for the MGS rate class, the proposed simplified rate structure for the LGS rate class aims to address two of the “failings” in the current rate structure – customer understanding and acceptance.¹³²

Related to BC Hydro’s proposed flattened energy charges for MGS and LGS rates, BC Hydro also seeks a final order approving the following:

- The termination of TS No. 82. This tariff supplement contains the rules for prospective growth applications for modified LGS pricing and will not be required if a flat energy charge without a historical baseline rate structure is approved for LGS customers. Any remaining customers being billed under TS No. 82 can be transferred to RS 16XX effective April 1, 2017.
- Dissolution of LGS and MGS control groups taking services under RS 12XX. Control groups will not be required for research purposes on conservation savings if the proposed flat rate structures for MGS and LGS are approved.
- Termination of RS 26xx (Exempt Rate for Corix’s LGS accounts). The need for an exempt rate will be removed with a default LGS flat energy rate.¹³³

¹²⁷ Exhibit B-1, p. 6-18.

¹²⁸ Ibid., p. 6-36.

¹²⁹ Ibid., p. 6-4.

¹³⁰ Exhibit B-1, Appendix C-4B, pp. 89-90 of 382.

¹³¹ Exhibit B-5, BCUC IR 1.82.5.

¹³² BC Hydro Final Argument dated September 26, 2016, p. 49.

¹³³ Exhibit B-1, pp. 6-72, 6-73; Note: Commission Order G-36-11 directed BC Hydro and Corix to negotiate an energy rate for Corix that is (i) flat, (ii) reflects BC Hydro’s embedded cost of heritage power, (iii) reflects BC Hydro’s long run marginal cost of new energy supply, and (iv) reflects BC Hydro’s avoided cost of having to serve Corix’s customers.

BC Hydro's proposed rate structure for the SGS is the continuation of the status quo whereas the proposals for the MGS and LGS rate classes include the two most significant proposed changes in this rate design application.

Recovery of customer-related and demand-related costs

BC Hydro uses the F2016 COSS to allocate costs to rate classes. In turn, the rate design for each rate class is informed by a comparison of energy, demand and customer-related costs identified in the F2016 COSS. The SGS rate basic charge cost recovery of customer-related costs and MGS and LGS demand charge recovery of demand-related costs are informed by this COSS.¹³⁴

The Commission approved an NSA on the F2016 COSS by Order G-47-16. BC Hydro submits that the resulting COS (NSA), which modified the F2016 COSS results, would not change the SGS pricing shown in the Application but would have a very slight effect on the MGS and LGS pricing shown in the Application. BC Hydro argues that, for transparency reasons, the F2016 COSS rather than the F2016 COS (NSA) should be used to inform the MGS and LGS pricing effective April 1, 2017.¹³⁵

Intervener arguments

No interveners oppose BC Hydro's proposals for the SGS, MGS or LGS rate classes.

Concerning the issue of whether the F2016 COSS or the COS (NSA) should be used when determining the fixed costs included in the demand charge for general service customers, BCSEA was the only intervener to comment, stating that it finds the use of the F2016 COSS instead of the COS (NSA) to be reasonable.¹³⁶ BCOAPO, while not commenting directly on this issue, indirectly referenced using the F2016 COSS instead of the COS (NSA). BCOAPO suggests that BC Hydro should, while maintaining its current demand charge proposal for the MGS rate class, acknowledge that recovery will effectively be less than 35 percent. BCOAPO further raises the question of whether the target for demand cost recovery for LGS should be reset at 59 percent as a result of the COS NSA, not 65 percent.¹³⁷

Commission determination

When making our determinations on BC Hydro's proposals for the SGS, MGS and LGS rate classes, the Panel considers the following issues for each general service rate class, where applicable:

1. Are the proposed rate structures consistent with the three Bonbright principles prioritized by BC Hydro (i.e. customer understanding and acceptance, rate stability for customers, and fair apportionment of costs among customers)?
2. Are the bill impacts substantial after the proposed one-time adjustments to existing rates?

¹³⁴ Exhibit B-1, pp. 3-36, 3-37.

¹³⁵ BC Hydro Final Argument, p. 37.

¹³⁶ BCSEA Final Argument, p. 37.

3. After the adjustment to bring the rate closer to full fixed cost recovery, is the resulting energy rate, adjusted for revenue neutrality, reasonably close to the LRMC range?
4. Should the recovery of customer-related and demand-related costs be based on the F2016 COSS or the COS (NSA)?

SGS

The Panel approves, effective April 1, 2017, BC Hydro's proposal to retain the existing flat energy rate structure for SGS and to increase the SGS basic charge recovery of customer-related costs from approximately 33 percent to 45 percent on a one-time basis with a one-time offsetting reduction to the energy rate based on the F2016 cost of service study. Thereafter, the annual revenue requirement increase shall be applied equally to all the elements within each rate structure for the SGS rate class.

The Panel considers the existing SGS flat energy rate structure to achieve the Bonbright principle of customer understanding and acceptance and notes that none of the interveners proposed changing the existing flat rate structure. We also agree that increasing the SGS basic charge recovery of customer-related costs from approximately 33 percent to 45 percent provides a fairer apportionment of costs by matching embedded cost recovery in rates with cost causation.

The Panel accepts BC Hydro's analysis of the bill impact for SGS customers resulting from the change in the basic charge recovery, which is an increase to the basic charge from 23.47 cents/day to 32.00 cents/day with an offsetting decrease to the energy charge from 11.16 cents/kwh to 11.01 cents/kwh. The Panel agrees with BC Hydro that this bill impact is minimal and we note that even with the small decrease in the energy rate, it is still reflective of the LRMC.

Regarding which of the two studies – F2016 COSS or the COS (NSA) – should be used to determine the percentage of costs recovered in the basic charge, the Panel notes that in the case of the SGS rate, both studies provided the same 45 percent recommendation.

MGS

The Panel approves BC Hydro's proposal to: (i) replace the existing MGS two-part energy rate with a flat energy rate; (ii) replace the existing three-step inclining block demand charge with a flat demand charge; and (iii) increase the recovery of demand-related costs in the demand charge from approximately 15 percent to 35 percent, effective April 1, 2017.

The Panel accepts that there is no single correct level of demand charge cost recovery; however, moving to 35 percent provides for a flat energy rate that is reflective of the LRMC and is therefore reasonable. Further, the Panel agrees that the two-part rate is too complicated and very few customers understand the rate and react to its price signals. In addition, since customers experiencing the highest bill impact are the low consumption and low load factor customers, the Panel finds that increasing the amount recovered through the demand charge to 35 percent is more reasonable than the status quo because a higher demand charge more closely reflects the cost to service low load factor customers.

The Panel agrees with BC Hydro that the F2016 COSS rather than the COS (NSA) should be used to inform the MGS pricing as the impact of the NSA on the MGS pricing is minimal and it is more transparent to utilize the F2016 COSS.

The Panel also accepts that stable rates for customers are a priority, and therefore **approves a one-year transition to the flat rate structure.**

LGS

The Panel approves BC Hydro's proposal to: (i) replace the existing LGS two-part energy rate with a flat energy rate; (ii) replace the existing three-step demand charge with a flat demand charge; and (iii) increase the demand charge recovery of demand-related costs from approximately 50 percent to 65 percent, effective April 1, 2017.

The Panel agrees that the existing rate structure is complex and not easy to understand. We give considerable weight to the Bonbright principle of customer understanding and, in our view, simplifying the rate structure results in rates that are more just and reasonable.

The proposed increase to the demand charge recovery to 65 percent creates an additional issue in that the resultant energy charge is very low and below the LRMC. The Panel acknowledges that this sends a less economically efficient price signal. However, the Panel notes that previously the price signal was economically efficient but because of the lack of customer understanding there was only minimal conservation realized. Therefore, we consider that the benefits of a simplified rate structure justify the trade-off between customer understanding and acceptance, and economic efficiency.

The Panel agrees with and approves BC Hydro's proposal for no phase-in period for the new rate structure, as it would delay the offsetting benefits of the LGS proposals with no significant benefit related to mitigating overall bill impacts.

Similar to our determination for the MGS rate class, the Panel finds that the F2016 COSS rather than the COS (NSA) should be used to inform the LGS pricing as the impact of the NSA on the LGS pricing is minimal and it is more transparent to use utilize the F2016 COSS.

Other determinations

The Panel directs that TS No. 82 be terminated. TS No. 82 is no longer required as the Panel has approved the flat energy charge without a historical baseline rate. Any remaining customers that are billed under TS No. 82 shall be transferred to RS 16xx effective April 1, 2017.

The Panel directs the LGS and MGS control groups taking services under RS 12xx to be dissolved. Control groups are not required for research purposes on conservation savings given that flat rate structures for MGS and LGS customers are approved.

The Panel directs Rate Schedule 26xx (Exempt Rate for Corix's LGS accounts) be terminated. The need for an exempt rate no longer exists given that a default LGS flat energy rate has been approved.

5.0 TRANSMISSION SERVICE RATE

5.1 Background

At the time of filing the Application, BC Hydro had eight transmission service rate schedules: RS 1823 (Stepped Rate), RS 1825 (Time of Use Rate), RS 1827 (Rate for Exempt Customers), RS 1852 (Modified Demand), RS 1853 (IPP Station Service), RS 1880 (Standby and Maintenance Supply), RS 1891 (Shore Power Service), and RS 3808 (a power purchase agreement between BC Hydro and FortisBC).¹³⁸

RS 1892

As part of this proceeding and by Order G-17-16, the Commission approved a pilot for a ninth transmission service rate, RS 1892 (Freshet Rate).

RS 1827, RS 1853 and RS 1852

RS 1827, RS 1853, and RS 1852 were addressed through a SRP and, by Order G-20-16, the Commission approved the status quo for RS 1827 and RS 1853 and wording changes to RS 1852.

RS 1825 and RS 1880

BC Hydro also proposes the status quo for RS 1825 in part because AMPC favours BC Hydro's efforts be directed at other options and also because it is unlikely the difference between on-peak and off-peak rates is significant enough to encourage a change in consumption patterns.¹³⁹

BC Hydro also indicates that the status quo is reasonable for RS 1880 as no concerns have been expressed by customers who use the rate.¹⁴⁰

RS 1891 and RS 3808

BC Hydro submits that RS 1891 was approved on June 25, 2015 by Order G-58-15 and was not part of the 2015 RDA.¹⁴¹

For similar reasons, BC Hydro indicates the Commission's May 6, 2014 RS 3808 Decision concerning BC Hydro's application to replace the 1993 Power Purchase Agreement (PPA) between BC Hydro and FortisBC under RS 3808 with a new PPA was not part of the development of the 2015 RDA, but still recognizes that the Commission has discretion with respect to the setting the scope of the 2015 RDA review.¹⁴²

¹³⁸ Exhibit B-1, p. 7-1.

¹³⁹ Ibid., p. 7-21.

¹⁴⁰ Ibid., p. 7-46.

¹⁴¹ Ibid., p. 1-12.

¹⁴² Ibid., p. 2-68.

5.2 BC Hydro rate proposals

In its final argument, BC Hydro explains it is only seeking an order with respect to RS 1823.¹⁴³ RS 1823 consists of a monthly minimum charge and the following pricing elements:

Table 5-1: Existing RS 1823 Rates (F2016)¹⁴⁴

Table 7-1 Existing RS 1823 Rates (F2016)	
Energy Rate A	4.303 cents/kWh (this is the flat rate for new accounts and customers that do not have a CBL)
Energy Rate B Tier 1	3.836 cents/kWh
Energy Rate B Tier 2	8.503 cents/kWh
Demand	7.341 \$/kV.A

Energy Rate B is a customized inclining block rate where a customer purchases annual energy volumes at the Tier 1 rate up to 90 percent of its customer baseline (CBL) and at the Tier 2 rate above 90 percent of its CBL.¹⁴⁵ BC Hydro explains that RS 1823 was designed to be customer bill neutral. That is, a customer whose annual consumption is 100 percent of its CBL will pay an average energy rate equal to the RS 1823 flat Energy Rate A.¹⁴⁶

BC Hydro proposes to retain the two step inclining block energy rate structure of RS 1823 as it works well, is well understood, and is supported by customers and industry.¹⁴⁷ However, BC Hydro seeks approval of the following pricing principles:

1. In F2017, set the Tier 2 rate at the low end of BC Hydro's energy LRMC and residually calculate the Tier 1 rate according to customer bill neutrality (bill neutrality is discussed in section 2.3). All other pricing elements of RS 1823 will increase by the applicable RRA rate increases; and
2. In F2018 and F2019, apply the applicable RRA increases equally to both the Tier 1 and Tier 2 rates, as well as all other pricing elements.¹⁴⁸

BC Hydro also proposes to continue with the current monthly minimum charge as there was general consensus among stakeholders that the existing demand charge is appropriate and consistent with industry practice.¹⁴⁹

In BC Hydro's view, notwithstanding subsection 3 (c) of Direction No. 6 which implies the Commission must uniformly increase the pricing elements of RS 1823, the Commission has jurisdiction over the manner in which RRA rate increases are applied to Tier 1 and Tier 2 rates, provided the Tier 2 rate remains within the LRMC range.¹⁵⁰ BC Hydro explains that this is because Direction No. 7/Heritage Contract Report Recommendation #8 requires the Commission ensure the Tier 2 rate reflects the cost of new supply.¹⁵¹

¹⁴³ BC Hydro Final Argument, p. 59.

¹⁴⁴ Exhibit B-1, p. 7-5.

¹⁴⁵ Ibid.

¹⁴⁶ Exhibit B-1, Appendix C-5A, p. 3.

¹⁴⁷ BC Hydro Final Argument, p. 59.

¹⁴⁸ Ibid., Appendix B, Draft Form of Order.

¹⁴⁹ Ibid., p. 63.

¹⁵⁰ Exhibit B-1, pp. 1-10–1-11; BC Hydro Final Argument, p. 61; Exhibit B-1, p. 7-7.

¹⁵¹ BC Hydro Final Argument, p. 61.

Direction No. 7 requires 90 percent of the power to be sold at the Tier 1 rate and the remaining 10 percent at the Tier 2 rate and the Tier 1 rate is to be derived from the Tier 2 rate and the 90/10 split to achieve revenue neutrality to the extent reasonably possible.¹⁵²

BC Hydro explains that when both the Tier 1 rate and the Tier 2 rate are increased by the maximum RRA increase, both definitions of revenue neutrality are satisfied. However, if the Tier 2 rate is increased (decreased) by an amount different than the maximum RRA increase, then it is necessary to choose between customer bill neutrality and forecast revenue neutrality when residually calculating the Tier 1 energy rate.¹⁵³

The F2016 Tier 2 rate is only 8.50 cents/kWh and if it were increased by the maximum allowed RRA increase in F2017 (i.e. 4 percent), it would only reach 8.84 cents/kWh which is still below the LRMC in F2017 (i.e. 8.92 cents/kWh).¹⁵⁴ Therefore, to bring RS 1823 into lawful compliance with Direction No. 7, it is necessary to increase the Tier 2 rate beyond the maximum RRA increase.¹⁵⁵

BC Hydro discusses three RS 1823 rate increase options that assume bill neutrality:

1. In F2017, set the Tier 2 rate to the low end of LRMC then residually calculate the Tier 1 rate. In F2018, apply the maximum RRA increases to both the Tier 1 and Tier 2 rates.
2. In F2017, F2018 and F2019, set the Tier 2 rate to the low end of LRMC then residually calculate the Tier 1 rate.
3. In F2017, apply all the increase to the Tier 2 rate. In F2018 and F2019, apply the maximum increase possible to the Tier 2 rate to reach the upper end of LRMC, and then residually calculate the Tier 1 rate.¹⁵⁶

Initially BC Hydro forecast revenue shortfalls of \$2.2 million under Option 1, \$4.5 million under Option 2, and \$32.5 million under Option 3.¹⁵⁷ However, in response to a BCOAPO IR BC Hydro revised its calculations. Under Option 1 the forecast revenue shortfall is now approximately \$0.4 million to \$0.5 million each year of the test period (\$1.4 million total). Under Option 2 there would be a forecast over recovery of \$0.8 million and under Option 3 a shortfall of \$28.3 million.¹⁵⁸ Under Option 1 the Tier 1 rates in F2017 would be 3.981 cents/kWh, 4.121 cents/kWh, and 4.244 cents/kWh respectively in F2017, F2018 and F2019.¹⁵⁹

BC Hydro explained that alternatively, if forecast revenue neutrality was applied by raising the Tier 1 rate to recover the shortfall in revenue for Option 1, the Tier 1 rates would be marginally higher at 3.986 cents/kWh, 4.125 cents/kWh, and 4.249 cents/kWh respectively in F2017 through F2019.¹⁶⁰

¹⁵² Exhibit B-1, pp. 2-6–2-7, 7-6.

¹⁵³ Ibid., pp. 7-7–7-8.

¹⁵⁴ Ibid., pp. 2-53, 7-6, 7-8; Exhibit B-17, p. 1; Exhibit B-37, Attachment 1, p. 9.

¹⁵⁵ Ibid., p. 7-8–7-9.

¹⁵⁶ Ibid., pp. 7-9–7-10.

¹⁵⁷ Ibid., p. 7-13.

¹⁵⁸ Exhibit B-5, BCOAPO IR 1.160.4; Exhibit B-23, BCOAPO IR 2.282.3.2.

¹⁵⁹ Exhibit B-1, p. 7-10.

¹⁶⁰ Exhibit B-5, BCOAPO IR 1.60.7.

BC Hydro favors customer bill neutrality and Option 1 for the following reasons:

- The under-recovery is relatively small;
- Tier 1 and 2 can be increased across the board by the RRA increases for F2018 and F2019;
- The price differential between Tier 2 and Tier 1 is maintained while keeping Tier 2 in the LRMC range;
- It is aligned with Policy Action No. 21 of the 2002 Energy Plan; and
- The Transmission Service rate class is not being subsidized by other rate classes.¹⁶¹

In addition, AMPC and customers taking service under RS 1823 support the continued use of customer bill neutrality.

Intervener arguments

AMPC, BCOAPO, BCSEA, CAPP, CEC, and NIARG support, agree with, do not oppose, or accept BC Hydro's transmission service rate proposal citing various reasons.¹⁶² MoveUP, Noble, EPHG, and FortisBC take no position.

CAPP supports Option 1 as the best method to apply RRA rate increases. CAPP supports this approach as it maintains the relative price differential between Tier 1 and Tier 2, maintains customer bill neutrality in all years and forecast revenue neutrality in two of the three years, is easily understood and is consistent with how RRA increases have been applied to other rates.¹⁶³ CAPP considers that the bill neutrality approach is more administratively straightforward for customers to understand and compliments the Option 1 approach of applying RRA rate increases uniformly to Tier 1 and Tier 2 rates. In addition, the Transmission Service Class revenue to cost ratio lies consistently above 100 indicating that there is no subsidization of this rate class by others.¹⁶⁴

Similarly, AMPC submits that "BC Hydro has proposed an updated RS 1823 rate that best captures the rate's original intent, including preserving its conservation signal and not unfairly penalizing customers that have already made conservation investments."¹⁶⁵

Contrary to this, CEBC proposes that RS 1823 be phased out after reasonable consultation with the industrial customers as it is giving an out-dated and increasingly inefficient price signal and many industrial customers may be relying on the Tier 2 rate to justify investments.¹⁶⁶

BCOAPO does not oppose BC Hydro's proposal for RS 1823 subject to its comments on neutrality discussed in section 2.3. It also states that it supports maintaining the status quo for RS 1825 and sees no reason to alter RS 1880 at this time.¹⁶⁷

¹⁶¹ Exhibit B-1, pp. 7-13-7-14.

¹⁶² AMPC Final Argument, p. 1; BCOPAO Final Argument, p. 17; CAPP Final Argument, p. 2; BCSEA Final Argument, p. 47; NIARG Final Argument, p. 6.

¹⁶³ CAPP Final Argument, p. 2.

¹⁶⁴ Ibid., p. 3.

¹⁶⁵ AMPC Final Argument, p. 1.

¹⁶⁶ CEBC Final Argument, p. 9.

No other intervenor provides substantive submissions on any other transmission rate in their final arguments.

BC Hydro reply argument

BC Hydro submits the following:

All interveners either support or take no position on BC Hydro's proposal to maintain the status quo as it relates to the stepped rate structure for RS 1823 customers and the RS 1823 F2017-F2019 Pricing Principles proposal. Importantly, both of the major customer groups directly affected by the rate, CAPP and AMPC, strongly support BC Hydro's Transmission Service rate proposals.

With reference to CEBC's submissions BC Hydro states:

For the reasons outlined in its Application and Final Argument, including strong stakeholder support for continuation of the current RS 1823 structure, and in consideration of the legislative directions that restrict options available with respect to RS 1823, BC Hydro says this idea should be rejected.¹⁶⁸

Commission determination

The Panel accepts BC Hydro's proposals to maintain the status quo for RS 1825 and RS 1880 and we make no determinations on RS 1891 and RS 3808 in this decision. No interveners opposed maintaining the status quo for RS 1825 and RS 1880, and there was no evidence put forth in support of deviating from the status quo. Further, since both RS 1891 and RS 3808 were the subject of recent decisions, the Panel sees no merit in making additional determinations on these rate schedules in this decision.

The Panel approves BC Hydro's proposal for RS 1823. Only CEBC supports a different position. BC Hydro's proposal is consistent with Direction 7/Recommendation #8, maintains the relative price differential between Tier 1 and Tier 2, allows both the Tier 1 and Tier 2 rates to be increased by the RRA increases in F2018 and F2019, has the smallest potential under-recovery of the three options, and the Transmission Service rate class is not being subsidized by other rate classes. It also provides for customer bill neutrality in all years of the test period, which is consistent with RS 1823's original intent.

The Panel denies CEBC's request to require BC Hydro to begin consultation on phasing out the inclining block nature of RS 1823 as there is no persuasive evidence on the record to support this proposal and legislative directions require continuation of RS 1823.

¹⁶⁷ BCOAPO Final Argument, pp. 15-19.

¹⁶⁸ BC Hydro Reply Argument, p. 15.

6.0 ELECTRIC TARIFF TERMS AND CONDITIONS

BC Hydro groups its proposed changes to its Terms and Conditions and standard charges into three main categories:

1. Updates to standard charges to improve cost apportionment;
2. Updates to the Electric Tariff language regarding the conditions under which a security deposit can be requested and the amount that can be assessed; and
3. Updates to the general language of the Terms and Conditions to reflect modern drafting concepts.¹⁶⁹

In addition to the approvals sought categorized above, BC Hydro seeks Commission endorsement of its proposed review of standard charges between rate design applications. BC Hydro proposes revenue requirement applications as the appropriate forum for updating existing standard charges to reflect current costs; whereas fundamental changes to standard charges, the introduction of new standard charges and/or major changes to the Terms and Conditions related to standard charges are preferably filed with and examined through rate design applications. BC Hydro states that these endorsements would “provide greater certainty and regulatory efficiency to future filings.”¹⁷⁰

6.1 Updates to standard charges

In the Application, BC Hydro explains that the Terms and Conditions, including the standard charges, were last considered by the Commission as part of the 2007 RDA and were based on F2006 costs; thus, BC Hydro submits there is a need to update the standard charges to reflect BC Hydro’s current costs.¹⁷¹ In addition to the cost updates, BC Hydro also proposes to remove certain standard charges which are based on obsolete charges for services no longer required and proposes to add two new charges.¹⁷²

BC Hydro provides the following table in the Application summarizing its proposed standard charges:¹⁷³

¹⁶⁹ BC Hydro Final Argument dated September 26, 2016, p. 65.

¹⁷⁰ Ibid., p. 66.

¹⁷¹ Exhibit B-1, Section 8.1.1, p. 8-2.

¹⁷² BC Hydro Final Argument dated September 26, 2016, p. 66.

¹⁷³ Exhibit B-1, Table 8-1, p. 8-6.

Table 6-1: Proposed Standard Charges

Standard Charge	Current	Proposed	Section of Chapter/Rationale
Minimum Reconnection Charge – default	\$125	\$30	Section 8.3.2 - Updated to reflect current costs; does not include IT costs based on stakeholder input
Late Payment Charge	1.5% per month	1.5% per month	Section 8.3.3 - Late Payment Charge recovers BC Hydro's costs and is a means to incent prompt payments
Returned Cheque Charge, to be re-named Returned Payment Charge	\$20	\$6	Section 8.3.4 - Currently, this charge is tied to BC Hydro's lead bank's non-sufficient funds (NSF) fee; change to reflect BC Hydro's actual costs
Account Charge	\$12.40	\$12.40	Section 8.3.5 - Two different cost drivers offset each other so charge remains the same
Meter Test Charge	\$125 (Minimum Reconnection Charge)	\$181	Section 8.3.6 - Proposed new charge reflecting cost recovery of first meter connection charge
Collection Charge	\$39	Remove	Section 8.3.7 - Outdated as most meters are disconnected remotely
DataPlus Service	\$360 per year	Remove	Section 8.3.7 - New enhanced data download service planned to be released to customers in early 2016 free of charge

Source: Exhibit B-1, p. 8-6.

BC Hydro's proposed reduction to the Minimum Reconnection Charge from \$125 to \$30 was approved by the Commission on an interim basis effective December 1, 2015 by Order G-175-15. BC Hydro seeks final approval of the Minimum Reconnection Charge effective April 1, 2017 as part of this decision.

In addition to the standard charges listed in Table 6-1, BC Hydro proposes updates to its Minimum Connection Charges, which are a subset of the standard charges. The changes to the Minimum Connection Charges are outlined in the following table:

Table 6-2: Changes to Minimum Connection Charges

	Current Charge (\$)	Proposed Charge (\$)
100A Overhead	463	799
200A Overhead	496	838
400A Overhead	798	Remove
100A Underground	605	957
200A Underground	855	1270
First Meter	92	181
Additional Meter	23	46
Call back Charge	194	368

Source: Exhibit B-1, Table 8-2, p. 8-7

The purpose of the proposed increases to the Minimum Connection Charges are to reflect updated material and labour costs, as the current charges are based on BC Hydro's F2006 costs.¹⁷⁴

With regard to BC Hydro's proposed changes to its standard charges, all interveners either supported or made no comment on these changes in their final arguments. The exception to this was with the Late Payment Charge which is discussed in the following subsection.

Commission determination

The late payment charge is discussed in detail in subsection 6.1.1 below and includes the Panel's determination. **The Panel approves all other changes to the standard charges as proposed by BC Hydro and directs that the interim Minimum Reconnection Charge established by Order G-175-15 be made permanent effective April 1, 2017.** The Panel accepts that BC Hydro's standard charges are cost-based and that it is appropriate for BC Hydro to recover these costs from customers. The Panel also notes that the inputs/costs comprising each of the standard charges were examined extensively through IRs and also reviewed during the pre-application workshops; thus based on the evidence provided, the Panel is persuaded the charges are just and reasonable and are reflective of BC Hydro's current costs.

6.1.1 Late payment charge

BC Hydro proposes no changes to the Late Payment Charge (LPC) on the basis that it recovers BC Hydro's costs. BC Hydro assesses a LPC of 1.5 percent per month on a customer bill with an unpaid balance of \$30 or more that has not been paid in full on or before the due date of the bill. BC Hydro explains that the 1.5 percent and the \$30 threshold for the LPC have been in place since their introduction in 1977.¹⁷⁵

¹⁷⁴ Ibid., p. 8-6.

¹⁷⁵ Ibid., pp. 8-11, 8-12.

BC Hydro submits that the purpose of the LPC is “foremost a cost recovery mechanism to compensate BC Hydro for expenses incurred as a result of the late payment and to take into account the time value of money, and also a means to induce prompt payments on the part of customers.”¹⁷⁶

In an erratum to the Application, BC Hydro provides its F2015 costs incurred related to LPCs which total \$7,353,711 against revenues of \$7,843,653. These costs include Accenture Business Service credit and call center costs, customer late payment communications costs, operating and maintenance (O&M) costs, and interest based on BC Hydro’s most recent Weighted Average Cost of Debt (WACD) of 4.28 percent.¹⁷⁷ BC Hydro states that it applies its WACD for purposes of security deposits and any other credits BC Hydro gives back to customers. If BC Hydro were to use a bank short-term interest rate instead of its WACD for calculating the LPC, it would be reduced from 1.5 percent per month to 1.25 percent per month. However, BC Hydro submits that this change would also then have to be applied to security deposits and any other customer credits.¹⁷⁸

Intervener arguments

CEC supports the existing LPC of 1.5 percent per month, stating that it finds the costing to be acceptable and is “in line with, or lower than most other jurisdictions.”¹⁷⁹

BCSEA and NIARG agree with BC Hydro’s methodology for calculating the LPC; however, they argue that short-term interest costs, not WACD, should be included in the LPC because in most instances where a LPC is assessed, it is related to a payment that is made within a short time frame after the payment’s due date.¹⁸⁰ NIARG further argues that use of BC Hydro’s short-term bank interest rate would be more consistent with the “principle of standard charges being cost-based rather than punitive.”¹⁸¹

As part of its proposals related to low income customers addressed in section 7.0, BCOAPO recommends that low-income customers be exempted from late payment charges.¹⁸² However, BCOAPO also recommends specific modifications to LPCs for all customers regardless of low income status which include the following:

- Limiting the imposition of a late payment charge to account balances that are at least 60-days overdue. BCOAPO argues that BC Hydro’s LPC is not “cost-justified” because it imposes a charge on customers before the costs to be recovered by that charge are incurred; and
- Reducing the late payment charge for all residential customers to the short-term cost of debt.¹⁸³ BCOAPO notes that during the oral hearing, BC Hydro’s witness testified that “if the interest that we paid on security deposits decreased to the amount of the short-term borrowing, that correspondingly the costs would also balance approximately if the late payment charge was reduced to 1.25 percent from 1.5 percent. The difference being that the change specifically in the interest rate on borrowing for deferred or delayed revenues.”¹⁸⁴

¹⁷⁶ Ibid., p. 8-13.

¹⁷⁷ Exhibit B-1-2, p. 8-13.

¹⁷⁸ Exhibit B-1, pp. 8-13, 8-14.

¹⁷⁹ CEC Final Argument, p. 136.

¹⁸⁰ BCSEA Final Argument, p. 48.

¹⁸¹ NIARG Final Argument, p. 6.

¹⁸² BCOAPO Final Argument dated September 26, 2016, p. 79.

¹⁸³ Ibid., pp. 83-84.

¹⁸⁴ BCOAPO Final Argument dated September 26, 2016, p. 84; Transcript Volume 6, p. 1146.

Zone II ratepayers' group argues that the LPC should be based on BC Hydro's short-term interest rate plus 0.5 percent rounded up to the nearest full percentage rate in consideration of the "current low interest rate environment." Zone II ratepayers' group also proposes an extension of 10 business days to the date before LPCs are applied for Zones IB and II communities due to mail and electronic access limitations.¹⁸⁵

BC Hydro reply argument

BC Hydro argues that the 1.5 percent LPC has been in place since 1977 and is consistent with the LPCs of other Canadian electric utilities and with both FortisBC utilities. BC Hydro further argues that "as confirmed by BC Hydro's evidence with respect to the cost basis for the 1.5 percent LPC, it recovers costs not only associated with compensating BC Hydro for carrying costs but also includes costs incurred with respect to the recovery of collection costs."¹⁸⁶ BC Hydro further argues that it is "of the view that WACD is a more appropriate measure of borrowing costs related to late payments than short-term interest rates." However, should the Commission determine that short-term interest rates be applied when calculating the LPC, BC Hydro submits that the short-term interest rate should also be applied when calculating interest paid on security deposits, as both are related to revenue collection.¹⁸⁷

BC Hydro submits that section 9 of its Rebuttal Evidence explains how customers who pay late cause BC Hydro to incur costs, which are about equal to the revenue generated from the portion of the LPC, and states this is in excess of BC Hydro's WACD. BC Hydro also states if only the cost of debt is recovered, then, as its Rebuttal Evidence shows, it would under-collect for costs incurred with respect to its dunning communications and other operational costs.¹⁸⁸

With regard to BCOAPO's request to limit the imposition of an LPC to account balances that are at least 60 days overdue, BC Hydro submits that if the charge for late payment is extended until 60 days after the due date, many of its costs would not be recovered and it would be out of pocket for carrying costs for 60 days before a bill is even issued. BC Hydro argues this would result in increased borrowing costs that would be borne by all customers.¹⁸⁹

With regard to Zone II ratepayers' group's request for an extension of 10 business days to the date before LPCs are applied, BC Hydro argues that such an order would be "inappropriate" because it "already accounts for possible mail delivery issues with respect to the application of the LPC specifically and receipt of bills more generally."¹⁹⁰

¹⁸⁵ Zone II Final Argument, p. 17.

¹⁸⁶ BC Hydro Reply Argument, p. 17.

¹⁸⁷ Ibid., p. 18.

¹⁸⁸ BC Hydro Final Argument dated October 11, 2016, p. 34.

¹⁸⁹ Ibid., p. 36.

¹⁹⁰ Ibid.

Commission determination

The Panel approves BC Hydro’s proposal to maintain the Late Payment Charge at 1.5 percent per month. The Panel considers an LPC of 1.5 percent per month to be reasonable and consistent with the LPCs applied by other Canadian electric utilities. The Panel agrees with BC Hydro that the use of WACD for LPCs is the most appropriate measure of borrowing costs and is consistent with BC Hydro’s revenue collection practices in other areas of its Electric Tariff, including interest paid on security deposits. The Panel acknowledges and agrees with BC Hydro’s statement that the LPC is foremost a cost recovery mechanism to compensate BC Hydro for expenses incurred as a result of the late payment and to take into account the time value of money. However, the Panel also considers the role that LPCs play in inducing prompt payment to be another important factor. If the current LPC rate of 1.5 percent were reduced the deterrent to paying bills in a timely manner would also be reduced as would BC Hydro’s ability to recover costs. Given these factors, the Panel is persuaded that the existing LPC is an appropriate deterrent to customer late payments.

The Panel declines to approve BCOAPO’s request to limit the imposition of LPCs to account balances that are at least 60 days overdue, as we consider BC Hydro’s rebuttal evidence as to the timing of when LPC costs are incurred to be persuasive. The Panel also accepts BC Hydro’s statement that it already accounts for possible mail delivery issues in its application of the LPC and therefore **the Panel declines to approve Zone II ratepayer group’s request to direct BC Hydro to extend the date before LPCs are applied by 10 business days.**

6.2 Updates to security deposits

BC Hydro proposes to change the Electric Tariff language regarding the application of security deposits in two ways:

1. To allow BC Hydro to charge a new security deposit or increase an existing security deposit if actual consumption is found to be significantly higher than the consumption that is estimated when the account was created; and
2. To allow for greater flexibility in the amount that is assessed.¹⁹¹

With regard to the first change, BC Hydro submits that this change will better protect customers against non-collection, as under the existing Electric Tariff provisions, BC Hydro may waive or assess a small security deposit on the basis of a small expected bill but later discover that actual consumption is significantly higher than anticipated. This results in BC Hydro under-securing the customer’s account relative to BC Hydro’s bad debt exposure. Further, under the current Electric Tariff provisions, BC Hydro does not have the ability to apply a new or increased security deposit.¹⁹²

With regard to the second change, BC Hydro proposes to change the language around the specific amount applied as a security deposit so that it is less prescriptive. BC Hydro proposes to change the wording in the Electric Tariff from “two times” or “three times” the customer’s average monthly bill to “up to” two or three times the average monthly bill. BC Hydro states that this change would allow it to charge a security deposit in a

¹⁹¹ BC Hydro Final Argument dated September 26, 2016, p. 71.

¹⁹² Ibid., pp. 71-72.

lesser amount to a lower risk customer and would also allow BC Hydro the option of setting standardized security deposits.¹⁹³

Intervener arguments

All interveners either supported or made no comment on BC Hydro's proposed changes to the Electric Tariff provisions for security deposits. However, BCOAPO requests that in addition, the Commission direct BC Hydro to amend its Electric Tariff to allow for new customer service rules for all residential customers related to security deposits. BCOAPO's proposed amendments are discussed further in section 7.6 of this decision.

Commission determination

The Panel approves BC Hydro's proposed changes to the Electric Tariff language regarding the application of security deposits. The Panel agrees that the changes provide better protection to BC Hydro from bad debt exposure related to the under-securing of customer accounts. Moreover, in our view, the changes provide more flexibility to BC Hydro in determining the amount of a security deposit to be assessed, which may result in smaller security deposits being assessed to certain customers.

6.3 Updates to the general language of the Terms and Conditions

BC Hydro explains in its final argument that it "used the opportunity of preparing its 2015 RDA to review its Terms and Conditions and update them to reflect modern drafting techniques and ensure consistency and clarity of language." BC Hydro describes the changes as "administrative in nature" and provided the changes in a black-lined copy of the Electric Tariff attached as part of Exhibit B-1-1.¹⁹⁴

No interveners objected to BC Hydro's proposed changes to the language of the Electric Tariff Terms and Conditions.

However, Mrs. Noble requests that BC Hydro amend the definition of "radio off meter" to include a sentence that says it is a "smart meter adjusted so that the meter's components that transmit and receive data by radio are deactivated."

BC Hydro states in its reply argument that it has "re-considered this request and is willing to amend the Electric Tariff definition of 'Radio-off Meter' to confirm that a Radio-off meter's components that transmit and receive data are deactivated." BC Hydro further states that it will file this proposed change to the Electric Tariff definitions section in a separate filing and thus an order from the Commission in this proceeding is unnecessary.

Commission determination

The Panel approves BC Hydro's proposed updates to the general language of the Electric Tariff Terms and Conditions. We agree that these updates reflect modern drafting techniques and ensure consistency and clarity of language.

¹⁹³ Ibid., p. 72.

¹⁹⁴ BC Hydro Final Argument dated September 26, 2016, p. 73.

The Panel acknowledges BC Hydro’s commitment to amend the Electric Tariff definition of “Radio-off Meter” to include both the terms “transmit” and “receive” data and we **direct BC Hydro to include its proposed wording in its Compliance filing due to the Commission in 30 days.**

6.4 Commission endorsement of future reviews of Standard Charges

In its final argument, BC Hydro seeks Commission endorsement of its proposed review of Standard Charges between rate design applications. Specifically, BC Hydro seeks endorsement of the following:

- RRAs are the appropriate forum for updating existing Standard Charges to reflect current costs; and
- Fundamental changes to Standard Charges, the introduction of new Standard Charges and/or major changes to the terms and conditions related to Standard Charges are preferably filed with and examined through RDAs.¹⁹⁵

BC Hydro argues that these endorsements “would provide greater certainty and regulatory efficiency to future filings.”¹⁹⁶

Intervener arguments

BCOAPO and CEC support BC Hydro’s proposal for reviewing Standard Charges. CEC “agrees with BC Hydro’s assessment of the appropriate forums and recommends that the Commission provide its endorsement as requested by BC Hydro.”¹⁹⁷ BCOAPO submits: “More regular reviews will allow for a more frequent review of standard charges and terms and conditions of service.”¹⁹⁸

Zone II ratepayers group disagrees that RRAs are the appropriate forum for updating Standard Charges to reflect current costs and also states that “if allowed at all it must be done with supporting costs and evidence.”¹⁹⁹

BC Hydro reply argument

BC Hydro responds to Zone II ratepayers group’s comments by pointing out that any future proposal BC Hydro makes regarding its Standard Charges would need to be justified and would be subject to information requests in the normal course of RRA proceedings. BC Hydro further points out that its request for Commission endorsement is “with respect to process only.”²⁰⁰

¹⁹⁵ Ibid., p. 66.

¹⁹⁶ Ibid.

¹⁹⁷ CEC Final Argument, pp. 137, 140.

¹⁹⁸ BCOAPO Final Argument dated October 11, 2016, pp. 20-21.

¹⁹⁹ Zone II Ratepayers Group Final Argument, p. 17.

²⁰⁰ BC Hydro Reply Argument, pp. 14-15.

Panel discussion

The Panel notes that BC Hydro previously requested the Commission’s “endorsement” as part of the BC Hydro Application for Approval of Debt Management Regulatory Account proceeding, in which BC Hydro requested a “non-binding endorsement” from the Commission of its debt management strategy.

Consistent with the Commission’s statements in the Reasons for Decision attached to Order G-42-16 regarding the BC Hydro Application for Approval of Debt Management Regulatory Account, this Panel declines to provide its endorsement of BC Hydro’s proposed approach to reviewing standard charges between rate design applications. However, the Panel takes no issue with BC Hydro’s proposed approach to reviewing standard charges between rate design applications.

7.0 BCOAPO LOW-INCOME PROPOSALS

In this proceeding, BCOAPO is asking the Commission “to implement a strategy to assist low income ratepayers who are having increasing difficulty paying their electricity bills in an environment where electricity rates continue to rise while many people’s incomes have stagnated.”²⁰¹ BCOAPO proposes the Commission direct BC Hydro to implement several low-income programs including an essential services usage block (ESUB) rate, a crisis intervention fund (CIF), amendments to the BC Hydro Electric Tariff for qualified low-income customers, and it also requests that BC Hydro be directed to adopt several business practices.²⁰²

In support of its proposals, BCOAPO has presented evidence of poverty in BC through its expert witness, Mr. Klein, as well as the testimony of six advocate witnesses and five individual BC Hydro residential ratepayers.²⁰³ BCOAPO’s low-income proposals were developed by its low-income rate design expert witness, Mr. Colton.²⁰⁴

In this section, the Panel considers:

1. The Commission’s jurisdiction to approve low-income rates in the absence of a regulatory justification (section 7.1); and
2. BCOAPO’s low-income proposals in light of the Panel’s determinations on jurisdiction (sections 7.2 to 7.7).

²⁰¹ BCOAPO Final Argument dated October 11, 2016, p. 3.

²⁰² Ibid., pp. 4-6.

²⁰³ Ibid., pp. 7-22.

²⁰⁴ Ibid., p. 50.

7.1 Jurisdictional issues

7.1.1 Introduction

BCOAPO argues: “When read together, Sections 59 and 60 [of the UCA] ground the Commission’s rate setting jurisdiction in a traditional cost of service analysis, while also giving the Commission discretion to consider other factors, such as ‘ability to pay’ and efficiency. In other words, while cost of service is a starting point to the Commission’s jurisdiction over rate setting, it is not determinative.”²⁰⁵

In addressing whether the Commission has jurisdiction under the UCA to direct BC Hydro to establish low-income rates, FortisBC introduces the term “non-status justifications”, which it describes as being a “cost-of-service justification or other justification related to the nature and quality of service to which the rates relate”.²⁰⁶

BCOAPO states that it “is not arguing that the Commission has the jurisdiction to consider ‘ability to pay’ in isolation. Rather, BCOAPO is arguing that the Commission has jurisdiction to exercise discretion to consider factors such as ability to pay in addition to ‘non-status justifications.’ More simply, BCOAPO is arguing the Commission has the jurisdiction to engage in a holistic and integrative rate-setting analysis.”²⁰⁷

BCOAPO further states that it “agrees that the legislation does not explicitly provide any reference to ‘ability to pay’” but it “reiterates its position that the UCA gives the Commission *discretion* to consider factors in addition to cost of service, such as ability to pay.” BCOAPO also submits that it is “not aware of direction by the legislature that the Commission does not have jurisdiction to consider ability to pay.”²⁰⁸

Panel discussion

The Panel’s view is if there is no jurisdiction to consider low-income rates in isolation then the “non-status justifications” must be, in and of themselves, sufficient. Accordingly, as a starting point, the Panel considers the Commission’s jurisdiction regarding low income rates in the absence of an economic or a cost of service rationale.

As a first step the Panel considers whether the UCA *explicitly* addresses the Commission’s jurisdiction to approve low-income rates in the absence of an economic or cost of service rationalization. We begin with an examination of sections 23 and 38 before considering whether the following excerpts from “rate making sections” provide a specific jurisdictional basis or restrict our jurisdiction in this matter:

- a. Sections 59-60, which state that rates must not be “unjust, unreasonable or unduly discriminatory”
- b. Section 60(1)(b.1), which states that “the commission may use any mechanism, formula or other method of setting the rate that it considers advisable, and may order that the

²⁰⁵ BCOAPO Final Argument dated September 26, 2016, p. 33.

²⁰⁶ FortisBC Final Argument, p. 1.

²⁰⁷ BCOAPO Reply Argument, p. 46.

²⁰⁸ Ibid., p. 44.

rate derived from such a mechanism, formula or other method is to remain in effect for a specified period”

The Panel will then consider Hansard minutes of Legislative Sessions before concluding with a review of the applicability and relevance of decisions from other jurisdictions.

7.1.2 Express and implied powers of the UCA

BCOAPO argues:

Both the common law and British Columbia’s *Interpretation Act* provide guidance in interpreting the Commission’s express and implied powers under the *UCA*. Canadian courts have long endorsed E.A. Driedger’s “Modern Approach” to statutory interpretation, which establishes:

Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act and the intention of Parliament.²⁰⁹

BC Hydro also cites the passage above, submitting also that the Commission is empowered only to do those things that:

- it is expressly empowered to do by the Legislature, or
- are necessarily implied by those powers it is expressly given by the Legislature.²¹⁰

Panel discussion

The Panel agrees with E.A. Driedger’s “Modern Approach” to statutory interpretation and therefore adopts this approach. In this context, the Panel considers whether the *UCA*, and in particular sections 23, 38, 59-60 and 60(1)(b.1) grant jurisdiction to the Commission to set a low-income rate, in the absence of an economic or cost of service justification.

7.1.2.1 *UCA* sections 23 and 38

BCOAPO submits the Commission has express jurisdiction and implied powers to order implementation of low-income programs. BCOAPO acknowledges the *UCA* does not contain a provision explicitly setting out its objectives, but submits the Commission’s public interest function can be clearly inferred from sections 23 and 38, as described below.

Read together contextually, Sections 23 and 38 give the Commission the express jurisdiction to ensure that public utilities are providing services in the public interest, as well as to consider the public interest in making orders and regulations. More specifically, the consideration of the public interest, in conjunction with Commission’s powers to ensure,

²⁰⁹ BCOAPO Final Argument dated September 26, 2016, p. 27.

²¹⁰ BC Hydro Final Argument, p. 81.

inter alia, the ‘convenience...of the public,’ ‘service of the public,’ ‘adequate [service]’ and ‘efficient [service],’ give the Commission the express jurisdiction to consider proposed low income programs, subject to Sections 59 and 60 of the UCA.²¹¹

FortisBC does not agree with BCOAPO that sections 23 and 38, combined with the Commission’s general public interest mandate gives the Commission jurisdiction to consider low-income rates. FortisBC characterizes this approach as “a potential application of the jurisdiction by necessary implication doctrine” and argues that “departures from common law expectations of non-discrimination and reasonableness should not be achieved by implication”.²¹²

FortisBC submits that the basic framework for determining statutory jurisdiction of an administrative tribunal is laid out by the Supreme Court of Canada’s 2006 decision in *ATCO*. FortisBC argues there are two potential sources of jurisdiction which were laid out: (1) express grants through the enabling legislation or (2) the common law doctrine of “jurisdiction by necessary implication”.²¹³ FortisBC also suggests, citing *Rawluk v. Rawluk*, that “another relevant principle of statutory interpretation is the presumption that a legislature does not intend a statute to change the prevailing law ‘without expressing its intentions to do so with irresistible clearness’.”²¹⁴ Therefore, FortisBC concludes that jurisdiction by necessary implication should not apply at all, because the UCA doesn’t contain the type of clear language that the courts have said is required to alter the established law.²¹⁵

With regard to FortisBC’s argument of jurisdiction by statutory interpretation, or, as BCOAPO refers to it, the “Presumption of Stability”, BCOAPO replies that FortisBC “appears to advance an extreme formulation which restricts any modification in the law to that stated explicitly.”²¹⁶ In BCOAPO’s view, “the more appropriate formulation is that modifications to the prevailing law may be made either expressly or by necessary implication. Even the case cited by FortisBC, *Rawluk v Rawluk*, references the possibility of changing the law through necessary implication when it concludes that ‘neither by direct reference nor by necessary implication does the Act prohibit the use of the constructive trust remedy’.”²¹⁷

BCOAPO submits the following:

The specific legal question in *ATCO* was whether the Alberta Energy Board had the power to allocate a portion of the net gain on the sale of the utility to the rate-paying customers. The City of Calgary argued that the Board had this jurisdiction under two open-ended provisions of the Board’s enabling statute. By way of FortisBC’s analysis, the Supreme Court of Canada could have applied the Presumption of Stability in its analysis, as the provisions at issue did not change the prevailing law with “irresistible clearness” to authorize the power to allocate proceeds from the sale of a utility’s asset. However, the Supreme Court of Canada did not refer to or apply the Presumption of Stability in its analysis. More specifically, it did not discuss the Presumption of Stability as a constraint on the doctrine of necessary implication.

²¹¹ Ibid., p. 32.

²¹² FortisBC Final Argument, p. 2.

²¹³ Ibid., p. 1.

²¹⁴ Ibid.

²¹⁵ Ibid., p. 2.

²¹⁶ BCOAPO Reply Argument, p. 46.

²¹⁷ Ibid., pp. 46-47.

Rather, it engaged in a detailed analysis of the Board's implicit powers, citing with approval the following passage from *Bell Canada v. Canada (Canadian Radio-Television and Telecommunications Commission)*, 1989 CanLII 67 (SCC), [1989] 1 S.C.R. 17212, at p. 1756:

The powers of any administrative tribunal must of course be stated in its enabling statute but they may also exist by necessary implication from the wording of the act, its structure and its purpose. Although courts must refrain from unduly broadening the powers of such regulatory authorities through judicial law-making, they must also avoid sterilizing these powers through overly technical interpretations of enabling statutes.²¹⁸

CEC does not agree with BCOAPO's submissions on the statutory power of the Commission to implement the low-income programs put forward in this proceeding, stating that "[t]he *Utilities Commission Act* simply does not provide either explicit or implicit authority to the Commission to implement these programs. BCOAPO sets out the correct test - that the Commission cannot exceed the powers that were granted by the enabling statute - and the CEC submits that implementing the programs would do precisely that."²¹⁹

MoveUP argues that "[i]n BCOAPO's Final Submission, counsel has properly situated that rate setting jurisdiction within the greater context of the BCUC's general supervision of public utilities (per section 23 of the UCA) and the requirement that public utilities must provide, 'service to the public that the commission considers in all respects adequate, safe, efficient, just and reasonable'. In this case, that context as well as an analysis of the wording of the rates sections clearly defines the Commission's jurisdiction as one that includes the lawful ability to approve low income rates provided they are fair, just and reasonable."²²⁰

Panel discussion

The Panel is not persuaded that sections 23 and 38 of the UCA explicitly grant the Commission jurisdiction to set a low-income rate, in the absence of an economic or cost of service justification.

The Panel agrees with BC Hydro that "the Commission is empowered to do only those things - including setting rates - that it is expressly authorized to do by the UCA, or which are necessarily implied by the UCA".²²¹ We further agree that there are no words regarding customers' financial circumstances or incomes, and that expressions to that effect in the rate-making sections of the UCA are conspicuously absent.

Section 23 of the UCA states:

General supervision of public utilities

23 (1) The commission has general supervision of all public utilities and may make orders about

- (a) equipment,*
- (b) appliances,*

²¹⁸ BCOAPO Reply Argument, pp. 47-48.

²¹⁹ Ibid.

²²⁰ MoveUP Final Argument, p. 9.

²²¹ BC Hydro Final Argument dated September 26, 2016, p. 81.

- (c) *safety devices,*
- (d) *extension of works or systems,*
- (e) *filing of rate schedules,*
- (f) *reporting, and*
- (g) *other matters it considers necessary or advisable for*
 - i. *the safety, convenience or service of the public, or*
 - ii. *the proper carrying out of this Act or of a contract, charter or franchise involving use of public property or rights.*

(2) Subject to this Act, the commission may make regulations requiring a public utility to conduct its operations in a way that does not unnecessarily interfere with, or cause unnecessary damage or inconvenience to, the public.

Section 38 states:

Public utility must provide service

38 A public utility must

- (a) provide, and*
- (b) maintain its property and equipment in a condition to enable it to provide,*

a service to the public that the commission considers is in all respects adequate, safe, efficient, just and reasonable.

As noted previously, the Panel adopts E.A. Driedger’s approach to statutory interpretation as it applies to reading the words of the UCA. In applying this approach, the Panel concludes that a plain reading of sections 23 and 38 does not support the view that these sections provide the Commission with jurisdiction to set low-income rates. There is no reference to the characteristics of a ratepayer and no requirement for the Commission to consider the economic status of a ratepayer.

The Panel agrees with FortisBC that “these sections are widely drafted and speak to the Commission’s general supervisory powers over public utilities.”²²² These sections address the issue of service and do not address the issue of rate setting. There is no evidence to indicate that they have ever been interpreted that way, nor is the Panel is not aware that they have ever been. Sections 23 and 38 should be interpreted “harmoniously within the scheme of the Act”, therefore the rate-making sections (59-60) of the UCA must also be considered when seeking jurisdiction for a low-income rate.

Given the considerations outlined above, the Panel does not consider that “jurisdiction by necessary implication” applies to an analysis of sections 23 and 38 in the context of setting low-income rates. In addition, the doctrine of “jurisdiction by necessary implication” requires a statutory objective to, in this case, implement low-income rates and there is no evidence that low-income rates are a statutory objective of the UCA. BCOAPO acknowledges that the UCA does not contain a provision explicitly setting out its objectives, but submits that the Commission’s public interest function can be clearly inferred from sections 23 and 38. The Panel considers this to be a circular argument.

²²² FortisBC Final Argument, p. 2.

7.1.2.2 UCA sections 59-60

The question to be addressed is whether low-income rates are unjust, unreasonable, or unduly discriminatory. Low-income rates that require subsidization from other ratepayers in the same class are, by definition, discriminatory. However, at issue is whether such rates are “unjust, unreasonable, or unduly discriminatory”, in which case they may not satisfy the requirements of section 59 and 60 of the UCA.

BCOAPO argues that by “including the qualifier ‘unduly,’ the Legislature clearly anticipated circumstances in which rate discrimination is permissible”, stating that “the Legislature intentionally created room for differential treatment where the discrimination is ‘due’.” It states that “the prohibition on ‘undue discrimination’ (as opposed to mere ‘discrimination’) also reflects established approaches to utility regulation, premised on the Bonbright principles.”²²³

On page 36 of BCOAPO’s September 26, 2016 Final Argument, it references the following passage from Charles F. Phillips’ *The Regulation of Public Utilities* (1984):

It should be noted at this point that discrimination is accepted in the rate structures of public utilities, but that such discrimination must be “just and reasonable”. Discrimination is both unintentional and purposive. It is unintentional in that some discrimination results from the efforts of utilities and commissions to simplify the rate structures by grouping customers into a limited number of classifications. It is purposive in that discrimination may be the only way in which service can be provided to some customers. Low-density routes may be subsidized by high density routes (even under competition), small towns by large cities. Rather than preventing discrimination, regulation merely seeks to control what discrimination takes place.²²⁴

BCOAPO also points out the following:

BC Hydro has stated that it interprets the Bonbright principle of “avoiding undue discrimination” as being a matter of the Commission’s opinion as to what constitutes “undue discrimination.” However, BC Hydro has stated the following about “undue discrimination”:

Generally speaking BC Hydro accepts Bonbright’s view that rates are unduly discriminatory when they have a serious distortion effect on the relative use of the service. This means rate structures must not be divorced from the nature and quality of the associated service, including cost of service.²²⁵

BCOAPO submits that when considering the “Commission’s public interest function, and its powers to ensure, *inter alia*, the ‘convenience...of the public’, ‘service of the public’, ‘adequate [service]’ and ‘efficient [service]’”, an “‘unjust or unreasonable’ rate can be interpreted to include a rate that renders BC Hydro’s services inadequate or inaccessible to low income ratepayers.”²²⁶

²²³ BCOAPO Final Argument dated September 26, 2016, p. 36.

²²⁴ Ibid.

²²⁵ Ibid.

²²⁶ Ibid., p. 38.

BCOAPo submits that the “ordinary meaning” of the wording in section 59 of UCA that “[a] public utility must not extend to any person a rule or a facility or privilege, unless the agreement, rule, facility or privilege is regularly and uniformly extended to all persons under substantially similar circumstances and conditions for service of the same description...” can be “interpreted as prohibiting public utilities from charging different rates for the same service provided to persons under substantially similar circumstances and conditions. In other words, section 59 can be interpreted as not precluding different rates for the same service provided to persons who are not under substantially similar circumstances and conditions.”²²⁷

BCOAPo argues that “a rate which fails to take account of the poverty of many households in the pricing of essential energy for heating, cleaning and cooking, when it would be practicable to adopt measures to help maintain those households’ access to essential energy, is unjust and unreasonable. A rate which ignores the fact of massive inequality of means, and the extreme inequality of impact of rising household energy cost on different households, is also unjust and unreasonable.”²²⁸

BCOAPo also submits that the Commission should take into account the following:

- The Demand Side Measures Regulation requires public utilities (including BC Hydro) to provide demand side management programs to low income residential customers, defined as of 2014 as being customers with incomes at or below the Low Income Cut Off (LICO) plus 30 percent.
- Similar to the Ontario Energy Board, the Commission has considered “rate shock” in both revenue requirements and rate design applications. Adopting similar reasoning as the Ontario Superior Court of Justice, this indicates that the Commission considers it has jurisdiction to take “ability to pay” into account in rate setting.
- The provincial government has embraced “postage stamp” rate-making, in which rates are the same no matter where its services are delivered, even though it may cost more to provide services to rural and remote parts of the province. As a result, similar to section 79 of the *Ontario Energy Board Act*, this system operates as a residential intra-class subsidy and represents a departure from the principle of cost causality being applied on the same basis to all consumers within a given class.
- Further, BC Hydro has acknowledged that the winter moratorium pilot will result in a departure from postage stamp rates because there are regional differences to the pilot. BC Hydro states that there are other examples of a departure from postage stamp rates, such as rates for non-integrated areas and extensions.²²⁹

BC Hydro argues that the expression ‘fair, just and not unduly discriminatory’ “captures the essential elements of the UCA’s rate-making provisions, as informed by a long history of judicial decisions on the meaning of ‘undue discrimination’, ‘subsidy’, ‘just and reasonable’, and related terms, as well the concept that not all factors a regulator may be asked to bring to bear in a rate-setting context are lawfully brought to bear.”²³⁰

²²⁷ Ibid.

²²⁸ Ibid., p. 38.

²²⁹ Ibid., p. 42.

²³⁰ BC Hydro Final Argument dated September 26, 2016, p. 86.

BC Hydro cites *Prince George Gas Co. v Inland Natural Gas Co* in its final argument as being a “more recent case that illustrates the fair, just and not unduly discriminatory standard” and submits the following:²³¹

...the BC Public Utilities Commission granted a CPCN to Prince George Gas Co. Ltd. (Prince George) on condition that it purchase natural gas from Inland Natural gas Co. Ltd (Inland) at a price that was intended to offset Inland’s cost of serving other Inland customers. The Court held the condition to be unlawful; it also had the following to say about the Commission’s rate-setting powers:

A requirement that one group of consumers contribute to the overall costs of a public utility system serving them [both] and others does not, per se, constitute a subsidy; that depends upon the circumstances. In so far as those costs fairly constitute part of the cost of providing service to the consumers they may be a proper element in the rates those consumers are called upon to pay; the fact that such contribution to those costs may reduce the rates of other consumers does not make it a subsidy. However, in that case the benefit to the other consumers is not the specific purpose of the contribution, but the incidental result flowing from a proper rate based upon the cost of service.

On the other hand that contribution to the overall costs becomes a subsidy if its specific purpose is to benefit other consumers without regard to the extent those costs properly enter into the cost of serving the contributing consumers.

A rate which is set without regard to what is a fair and reasonable charge for the services rendered by a public utility, for the express purpose of compelling some consumers to subsidize others, is, in my opinion, inconsistent with the statutory provisions governing rates...

One of the cardinal principles governing rates from the standpoint of the customer is set out in section 16(b), which directs the commission, inter alia, to have due regard to the protection of the public from rates

that are excessive as being more than a fair and reasonable charge for services of the nature and quality furnished by the public utility

BC Hydro also states that it undertook a “comprehensive analysis” of sections 58-61 of the UCA in its final argument in the 2008 RIB rate proceeding and “specifically addressed the sections that give the Commission its rate-setting powers.”²³² As applied to this proceeding, BC Hydro summarises that analysis as follows:

- Thus, by a process of elimination, BC Hydro submits that if the Commission has the jurisdiction to set lifeline rates, it is to be found in subsections 60(1) and 59(4) and (5) of the UCA, as specifically informed by sections 59(1) and (2), the scheme of the Act, and in light of the intention of the legislature.
- In BC Hydro’s submission these provisions point to rate- setting criteria that are founded on the characteristics of the service provided, and that are primarily economic in nature. That is, where the

²³¹ BC Hydro Final Argument dated September 26, 2016, pp. 88-89.

²³² Ibid., p. 89.

open-ended words such as “fair”, “just”, “discriminatory” and the like are used, they are given economic, service-based meaning by those provisions that are not open-ended.²³³

BCOAPO argues that the *Prince George Gas Co. v Inland Natural Gas Co* decision cited by BC Hydro “is not directly applicable to [BC Hydro’s] argument because BCOAPO is not advocating that the Commission authorize a low income rate without reference to cost of service or with the ‘express purpose’ of a subsidy. Rather, BCOAPO submits that there are three justifications for the low income rate: It will improve cost-reflectivity to low income, low-use customers; it will increase the efficiency of BC Hydro operations; and it will improve the affordability of essential electric service to low income customers.”²³⁴

In its final argument, MoveUP states:

Despite hundreds of pages of argument having been filed thus far, there is no legal basis upon which BC Hydro can seek to limit an interpretation of the word “just” or its antonym “unjust” as it is used in the UCA from the consideration of moral fairness or righteousness of the rates the Commission imposes. Nothing in the law relied upon by BC Hydro in its attempt to scuttle BCOAPO’s low income proposals would relieve the Commission of its obligation to consider the full meaning of these words in its interpretation of the UCA, and in particular the broad jurisdiction granted to it by sections 23, 38, 59 and 60 of that Act.

It further submits:

BC Hydro appears to be relying [on] the idea that low income rate designs, because they involve subsidies between ratepayers, inevitably engage in undue discrimination. While the connotation of the word discrimination is wholly negative, the reality is that in the context of energy utility regulation, discrimination is necessary unless the utility is willing and able to charge each customer individualized rates that reflect the true cost to serve them. In reality that is not practicable so discrimination is the Utility’s only alternative. Charles F. Phillips’ staple regulatory treatise, *The Regulation of Public Utilities*¹¹ recognizes that discrimination in rates is built into utility regulation and that it is perfectly acceptable provided it is discrimination based on just and reasonable grounds.

And finally, regarding postage stamp rates MoveUP submits:

It is trite that subsidies are the bedrock of all utility regulation and the bricks and mortar upon which British Columbia’s postage stamp rates are built. In our province, depending on a number of factors, high volume users, those closest to energy sources and those in high density areas may subsidize those who are low volume users, and those who live in more remote or low density areas because within each rate class, everyone currently pays the same rate.²³⁵

²³³ BC Hydro Final Argument, pp. 89-92.

²³⁴ BCOAPO Final Argument dated October 11, 2016, p. 35.

²³⁵ MoveUP Final Argument, pp. 17-20.

Commission determination

The Panel finds that low-income rates unsupported by an economic or cost of service justification are unjust, unreasonable and unduly discriminatory and are therefore not in accordance with sections 59 - 60 of the UCA.

On a plain reading of the UCA, the Commission is required to ensure that rates are not unjust, unreasonable or unduly discriminatory.

The Panel agrees with BC Hydro's analysis of sections 59–60 of the UCA. The rate setting provisions of the UCA are founded on the characteristic of the service provided and are primarily economic in nature. There is nothing in the plain wording of the UCA indicating that they mean otherwise.

The Panel also agrees with the court in *Prince George*, that “a rate which is set, without regard to what is a fair and reasonable charge for the services rendered by a public utility, for the express purpose of compelling some consumers to subsidize others, is, in my opinion, inconsistent with the statutory provisions governing rates.”

With regard to MoveUP's assertion that “BC Hydro appears to be relying [on] the idea that low income rate designs, because they involve subsidies between ratepayers, inevitably engage in undue discrimination,” the Panel takes no position on what BC Hydro is or is not relying on. However, in our view, a low-income rate design rate in the absence of an economic or cost of service justification is necessarily unduly discriminatory because it discriminates on the basis of a customer's personal characteristics as opposed to its electricity consumption characteristics.

BCOAPO suggests that postage stamp rates are a form of undue discrimination and states that the provincial government has previously “embraced postage stamp rate-making.” The Panel notes BC Hydro's argument that they are a practical necessity because of the difficulty and costs involved in separating the cost of service to different regions, which thereby provides an economic basis for these rates.

We agree with BCOAPO that public utilities provide DSM programs to low-income residential customers. However, this circumstance arises because of the Demand Side Measures Regulation. There is no such regulation requiring utilities to offer a low-income rate to its ratepayers.

Rate smoothing to prevent rate shock may give rise to discrimination among generations of customers (intergenerational equity). However, in most cases rate smoothing arguably does not take place over sufficient time to affect a “generation” so the applicability of this comparator may be limited. In any event, the issue is whether the discrimination is undue. BCOAPO appears to be arguing that because rate smoothing has been accepted by the Commission, it could be used as a benchmark of what ‘unduly discriminatory’ is not. However, no evidence has been provided by any party on what quantum of rate impact would be required to constitute undue discrimination or what other elements of discrimination would be required to render a rate unduly discriminatory.

With regard to the winter moratorium pilot, the Panel notes that BC Hydro does not seek approval from the Commission for this pilot, nor is it required to obtain this approval, because operational discretion is granted in the tariff. Therefore this pilot is just and reasonable.

7.1.2.3 Section 60(1)(b.1)

Section 60(1)(b.1) of the UCA states:

the commission 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

BCOAPO argues that “when interpreting section 60(1)(b), it is important to note that the Commission is only required to ‘have due regard’ to the limits defined within. In other words, the limits do not constitute absolute prohibitions on the Commission’s rate setting jurisdiction. The presumption against tautology requires the Commission to give appropriate weight to the term ‘due regard’.”²³⁶

BCOAPO points out that “Section 5(c) of Special Direction No. 7 states that in setting BC Hydro’s rates, the Commission may ‘employ any mechanism, formula or method referred to in section 60 (1) (b.1) of the *Utilities Commission Act*.’ Section 5(d) states that the Commission, ‘unless a different mechanism, formula or method is employed under paragraph (c), must ensure that electricity used by the authority to meet its domestic service obligations is provided to customers on a cost-of-service basis.’” BCOAPO concludes that “Section 5 therefore explicitly contemplates the Commission departing from a cost-of-service basis (s.5(d)).”²³⁷

BC Hydro argues that the only words in the UCA that could plausibly be construed as to provide the Commission jurisdiction to approve low-income rates are in subsection 60(1)(b.1). However, BC Hydro argues that unlike the proposed 2008, 2014 and 2016 amendments to the UCA, these words “do not express a clear legislative intent regarding Basic LI [Low Income] Jurisdiction” and “are not narrowly limited to low-income issues but rather, if accepted as the basis for Basic LI Jurisdiction, allow broadly for any number of rate-setting schemes intended to advance a myriad public policy objectives.”²³⁸

FortisBC argues that to construe section 60(1)(b.1) as “bestowing low-income rate setting jurisdiction on the Commission would be inconsistent with the express statutory provisions regarding non-discriminatory and non-preferential utility service in s. 59 of the *UCA*.” Further, “[o]ffering such a rate would also involve extending to a person ‘a form of agreement ... or privilege’ that is ‘not regularly and uniformly extended to all persons under substantially similar circumstances and conditions for service of the same description’.”²³⁹

FortisBC also comments that BCOAPO’s strained analysis demonstrates that section 60(1)(b.1) does not use the clear language the Supreme Court of Canada has said is necessary for a statute to change the prevailing law and that would be needed to establish the requisite jurisdiction.”²⁴⁰

²³⁶ BCOAPO Final Argument dated September 26, 2016, p. 35.

²³⁷ BCOAPO Final Argument, p. 34.

²³⁸ BC Hydro Final Argument, p. 101.

²³⁹ FortisBC Final Argument, pp. 3-4.

²⁴⁰ Ibid., p. 4.

FortisBC also points out that the 1993 edition of the Phillips text *The Regulation of Public Utilities* includes a discussion of “Lifeline Rates”. Phillips cites a number of US utility cases where it has been held that undue discrimination does occur when rates are set based upon ability to pay, and FortisBC quotes *Washington Gas Light Co* as an example.²⁴¹

CEC submits that BCOAPO has misinterpreted Special Direction No. 7. CEC submits the intent of section 5(c) of the special direction is to enable the use of performance based regulation and nowhere does it provide direction that rate making be based on assessment of affordability or income.²⁴²

With regard to CEC’s comments on BCOAPO’s submission on section 5(c) of Special Direction No. 7, BCOAPO states “the CEC correctly notes that section 5(c) of Special Direction No. 7 does not direct rate making to be based on assessment of affordability or income. However, it is equally correct that Special Direction No. 7 does not direct the use of performance based regulation either. Rather, the authorizing language is broad and permits the use of ‘any mechanism, formula or method’ to set rates. The sole requirement, set out in *UCA* s.60(1)(b.1), is that the Commission considers the use of such mechanism, formula or method to be ‘advisable’. It would have been simple for the legislature to specify that the Commission could set rates based on either of two alternatives: cost of service or performance based regulation. The fact that it did not do so suggests that the more reasonable interpretation of Special Direction No. 7 and *UCA* s. 60(1)(b.1) is that the Commission has much broader discretion than suggested by the CEC.”²⁴³

Panel discussion

The Panel agrees with BCOAPO’s argument that on its face, section 60(1)(b.1), could provide the Commission with the necessary jurisdiction. This section allows the Commission to consider rate-setting methodologies other than cost of service. A low-income rate, if the customer pays less than the cost of service, is exactly that.

However, section 60(1)(b.1) must be considered in the context of other provisions of the *UCA* - sections 59 and 60 require rates to be just, reasonable and not unduly discriminatory. The Panel has previously addressed sections 59 and 60 and found that low-income rates, in the absence of an economic or cost of service justification, do not satisfy sections 59 and 60. Therefore section 60(1)(b.1) cannot provide the necessary jurisdiction.

7.1.3 Statements made in the legislature

BC Hydro states that “[l]egislative intent can be inferred using a variety of techniques, including a close analysis of the words of the enactment themselves. However, statements made about a statute in the legislature are also relevant to determining legislative intent. These statements are admissible and may be considered sufficiently reliable to serve as direct or indirect evidence of legislative purpose.”²⁴⁴

²⁴¹ Ibid., pp. 3-5.

²⁴² CEC Final Argument, p. 53.

²⁴³ BCOAPO Reply Argument, p. 45.

²⁴⁴ BC Hydro Final Argument, pp. 82-83.

The Panel agrees and will now consider such statements.

7.1.3.1 Enactment of the UCA

BCOAPO submits that the “Commission’s public interest function was underscored during the passing of the UCA” and BCOAPO cites the Honourable Robert H. McClelland’s statements when the UCA was introduced for second reading in the legislature in 1980:

As I've said, the BC Utilities Commission will take over from the Energy Commission the role of rate regulation. This role will be expanded to include the regulation of BC Hydro rates. Proposed rate increases will be subject to hearings before the Utilities Commission. These hearings will ensure a rate structure for energy that is fair to all and consistent with overall government energy policy. In addition, the Utilities Commission will take on the regulation of services and additions to facilities of all energy utilities in the province, including B.C. Hydro. In this role the commission can help to ensure secure and continuous supplies of energy to all British Columbians.²⁴⁵

BCOAPO is of the view that the Honourable Robert H. McClelland’s reference to the Commission’s role in ensuring ‘secure and continuous supplies of energy to all British Columbians’ reflects the requirement under section 38 to provide a service to the public that is ‘adequate.’ BCOAPO submits that BC Hydro’s service to the public is “not adequate where, by virtue of its cost, it is not accessible to all British Columbians to meet their basic energy needs.”²⁴⁶

Concerning BCOAPO’s argument regarding comments concerning the statutory goal that utility services are priced so they are “accessible to all British Columbians”, made in the legislature in 1980, FortisBC argues that the Hansard cited in support of this statutory objective doesn’t go as far as BCOAPO suggests. FortisBC further argues that such an objective is inconsistent with established rate setting principles under the UCA.²⁴⁷

7.1.3.2 Proposed UCA amendments regarding low-income rates

In its final argument, BC Hydro cites the April 2008, March 2014 and March 2016 proposed amendments to the UCA which were tabled in the Legislative Assembly of British Columbia to provide the Commission with the authority to create a discounted low-income rate. BC Hydro further cites the 2014 and 2016 explanatory notes to the respective bills which stated:

This Bill provides that the British Columbia Utilities Commission may require a utility to make a discounted lifeline rate in order to maintain the affordability of energy for eligible low-income households.²⁴⁸

BC Hydro submits that in each case, the proposed bills were either defeated or did not progress past first reading.²⁴⁹

²⁴⁵ BCOAPO Final Argument dated September 26, 2016, p. 33.

²⁴⁶ BCOAPO Final Argument, p. 33.

²⁴⁷ FortisBC Final Argument, p. 3.

²⁴⁸ BC Hydro Final Argument dated September 26, 2016, p. 83.

²⁴⁹ Ibid., p. 83.

BCOAPO “does not view the BC NDP’s proposed amendments as at all indicative of legislative intent. The BC NDP was the Official Opposition when the *UCA* was passed in 1980 and at the time of each of the proposed amendments in 2008, 2014, and 2016. The Official Opposition surely did not expect the proposed amendments to pass. Rather, the proposed amendments essentially amount to political posturing by the Official Opposition and should be understood as such.”²⁵⁰

In BCOAPO’s view, because “[t]his jurisdictional question was a live issue in BC Hydro’s 2008 Residential Inclining Block (RIB) Rate Application (which was already underway when the Official Opposition introduced the proposed amendment in April 2008)” the Official Opposition “seized upon the lack of clarity around the Commission’s jurisdiction.”²⁵¹

BCOAPO also argues that the NDP’s proposed amendments are “more prescriptive” than the jurisdiction that already exists. Therefore, “the proposed amendments can be seen as narrowing existing jurisdiction, rather than expanding it.” BCOAPO submits that “[t]he proposed amendments explicitly authorize the Commission to order a lifeline rate and prescribe what the Commission must do when ordering a lifeline rate. Further, the proposed amendments only authorize the Commission to implement a lifeline rate. They do not speak to the Commission’s jurisdiction to order other low income programs.”²⁵²

MoveUP argues that BC Hydro sought to rely upon MLA John Horgan’s introduction of Private Members’ Bills in 2008, 2014, and 2016 as evidence of legislative intent. These private bills sought to make explicit the BCUC’s jurisdiction to set low-income rates. With respect, BC Hydro’s reliance upon the *Sullivan* case (Tab 2 of BC Hydro’s Book of Authorities) fails utterly to counter the important purpose of section 37 of the *Interpretation Act*, a section the Union notes, amongst other things, “prevents the unthinkable situation where a Private Members’ Bill could actually be crafted specifically or used after the fact to bring about an alteration in the interpretation and application of the law.”

MoveUP concludes that “A fortiori, a Private Member’s Bill, particularly one introduced by an Opposition MLA and never adopted by the Legislature, cannot be relied upon to interpret the state of the law.”²⁵³

7.1.3.3 UCA Amendment 2003, Bill 40

Bill 40 introduced the following additions to section 60(1) of the UCA:

(b)(ii). provides to the public utility for which the rate is set a fair and reasonable return on any expenditure made by it to reduce energy demands, and

(b)(iii). encourages public utilities to increase efficiency, reduce costs and enhance performance,

²⁵⁰ BCOAPO Final Argument dated October 11, 2016, p. 30.

²⁵¹ Ibid.

²⁵² Ibid.

²⁵³ MoveUP Final Argument, pp. 16-17.

(b.1) the commission 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, and

BC Hydro quotes comments made by Honourable Richard Neufeld, the minister responsible at the time for the UCA, on second reading of the amendments, in particular the following comment about the above changes:

(they) eliminate a bias against utility energy conservation investments and encourage performance-based regulation²⁵⁴

BC Hydro states that “it is apparent that none of the comments relate to establishing a low-income rate jurisdiction. Further, the over-arching purpose of the 2003 UCA was said to be the implementation of the 2002 Energy Plan, and that expression of government policy says nothing about the establishment of low-income rate jurisdiction in the Commission.”²⁵⁵

With reference to subsection (b.1) BC Hydro further submits:

A few textual observations may be made about this provision in the context of the Basic LI Jurisdiction issue before the Commission:

- unlike the Manitoba legislation, or the proposed 2008, 2014 and 2016 amendments to the UCA, do not expressly trump the conventional rate-making jurisdiction of the Commission;
- unlike the Ontario legislation, are not squarely included within the statutory standard, but stand beside it.²⁵⁶

BC Hydro concludes that “[f]or these reasons alone the Commission can and should find that subsection 60(1)(b.1) of the UCA does not evidence a legislative intent to empower the Commission to set low-income rates. However, there is an additional and determinative reason to make that finding, namely that the actual legislative intent is readily apparent from the Legislative debates regarding this provision and other amendments that were made to the UCA at the time”.²⁵⁷

BC Hydro argues that “BCOAPO fails to offer any evidence or indeed much argument regarding a legislative intent in regard to Basic low income Jurisdiction.” BC Hydro submits that the extracts from Hansard included in its final argument indicate clearly a legislative intent to not empower the Commission with such jurisdiction, while “[t]he BCOAPO offers nothing comparable, except a short reference to Hansard from 1980.”

²⁵⁴ BC Hydro Final Argument dated September 26, 2016, p. 104.

²⁵⁵ Ibid., p. 105.

²⁵⁶ BC Hydro Final Argument dated September 26, 2016, pp. 101-102.

²⁵⁷ Ibid., p. 101-102.

7.1.3.4 Dynamic interpretation of the legislation

BCOAPO argues that “Where a statute has been enacted to regulate an ongoing activity over an infinite period of time, as has the *UCA*, there should be a dynamic interpretation of the legislation, and the Commission must consider evidence of current circumstances in its analysis”, citing *Interpretation Act*, R.S.B.C. 1996, c. 238, ss. 7 and 8, and *R. v. 974649 Ontario Inc.*, [2001] 3 SCR 575.²⁵⁸

With regard to BCOAPO’s “dynamic interpretation” argument, BC Hydro states: “the BCOAPO does not articulate what current circumstances would have caused the Commission’s jurisdiction to evolve. BC Hydro suggests that this is at least in part because the evidence of Mr. Klein was clear that poverty rates in British Columbia are at ‘a low not seen since 1980’ (the year that the *UCA* was enacted).”

BC Hydro further argues that *R. v. 9746489*, the case cited by BCOAPO in support of its “dynamic interpretation” argument, makes clear that “the dynamic approach preserves the original intention of the legislature by accommodating changed circumstances: ‘Preserving the original intention of Parliament or the legislatures requires a dynamic approach... sensitive to evolving social and material realities’. Therefore, the ‘dynamic approach’ can only assist the Commission if the original intent of the legislature was to effect a low-income rate jurisdiction that because of changed circumstances cannot be realized. That is not the situation before the Commission.”²⁵⁹

Commission determination

The Panel is not persuaded that the excerpted statement from the Honourable Robert H. McClelland, quoted by BCOAPO in final argument and referred to at the beginning of section 7.1.3 of this decision, supports BCOAPO’s argument that there is legislative intent to provide the Commission with jurisdiction to set low-income rates. Mr. McClelland referred to “a rate structure for energy that is fair to all and consistent with overall government energy policy.” However, the Panel can find no evidence that included in government energy policy is an intention to provide low-income rates. If that were the case, it would have been clearly articulated in the government’s energy policy. It is not.

BCOAPO contends that the Commission’s role in ensuring ‘secure and continuous supplies of energy to all British Columbians’ reflects the requirement under section 38 to provide a service to the public that is ‘adequate’. The Panel does not agree that this provides the necessary jurisdiction. The Hansard reference to ‘secure and continuous supplies of energy’ makes no reference to the cost of the energy or to the ability of customers to pay for that energy.

The Panel also notes that the legislature has, on three occasions, declined to amend the *UCA* to include explicit support for a “lifeline rate for low income households.” On these three occasions the amendments were not introduced by government, but were Private Member’s Bills. MoveUP has argued that a Private Member’s bill introduced by an Opposition MLA cannot be relied on to interpret the state of the law. To support its position MoveUp cites section 37 of the *Interpretation Act*:

²⁵⁸ BCOAPO Final Argument, p. 28.

²⁵⁹ BC Hydro Final Argument, p. 22.

No implications from repeal, amendment, etc.

37 (1) The repeal of all or part of an enactment, or the repeal of an enactment and the substitution for it of another enactment, or the amendment of an enactment must not be construed to be or to involve either a declaration that the enactment was or was considered by the Legislature or other body or person who enacted it to have been previously in force, or a declaration about the previous state of the law.

(2) The amendment of an enactment must not be construed to be or to involve a declaration that the law under the enactment prior to the amendment was or was considered by the Legislature or other body or person who enacted it to have been different from the law under the enactment as amended.

(3) An amendment, consolidation, re-enactment or revision of an enactment must not be construed to be or to involve an adoption of the construction that has by judicial decision or otherwise been placed on the language used in the enactment or on similar language.

In the Panel's view this section of the *Interpretation Act* does not apply. Subsection 1 requires "The repeal of all or part of an enactment, or the repeal of an enactment and the substitution for it of another enactment, or the amendment of an enactment"; subsection 2 requires "The amendment of an enactment" and subsection 3 requires "An amendment, consolidation, re-enactment or revision of an enactment". None of these conditions are met. In this circumstance a proposed bill – which provided for "lifeline rates" - was defeated or didn't proceed past first reading. Therefore, the Panel finds this does not preclude consideration of the handling of proposed bills by the British Columbia Legislature, as guidance in determining legislative intent.

BCOAPPO argues that the proposed amendments cited by BC Hydro do not indicate legislative intent for a number of reasons, including that the proposed amendments differ from the current BCOAPPO proposals. The Panel agrees that to the extent the proposed amendments differ in a material way from the current proposals, the fact that the legislature declined to amend the UCA should be given little weight.

With regard to the addition of subsection 60(1)(b.1), it appears to the Panel that the intent of the legislature was to "eliminate a bias against utility energy conservation investments and encourage performance based regulation."²⁶⁰ In addition to section 60(1)(b.1), Bill 40 also introduced 60(1)(b)(ii), which states, "...provides to the public utility for which the rate is set a fair and reasonable return on any expenditure made by it to reduce energy demands," and 60(1)(b)(iii), which states "encourages public utilities to increase efficiency, reduce costs and enhance performance". Subsections 60(1)(b)(ii) and 60(1)(b)(iii) were introduced to support the recovery in rates of expenditures to reduce energy demand (i.e. demand side management) and to encourage utilities to reduce costs and increase efficiency. This intent was underlined by the minister's comments which were quoted above by BC Hydro. It is clear to the Panel that these subsections were not intended to provide a jurisdictional basis for low-income rates.

²⁶⁰ BC Hydro Final Argument dated September 26, 2016, Book of Authorities, Tab 22.

With regard to BCOAPO’s “dynamic interpretation” argument, the Panel finds that BCOAPO has failed to provide sufficient “evidence of current circumstances” for the Panel to make any determination on this issue. The Panel notes BC Hydro has raised a significant issue in its final argument – that poverty rates are at a low not seen since the UCA was enacted. Therefore “current circumstances” do not support the view that regardless of the original intent of the legislature, the UCA should be interpreted as providing the jurisdictional basis for low-income rates. BCOAPO has failed to address this issue.

The Panel finds no evidence of legislative intent to provide the Commission with jurisdiction to set low-income rates. There is no evidence the legislature intended the UCA to provide jurisdiction for low-income rates in the absence of an economic or cost of service justification. Indeed, the evidence that does exist (i.e. the proposed amendments to the UCA which were tabled in the Legislative Assembly of British Columbia) supports the view that the legislature has expressly turned down low-income amendments.

7.1.4 Other jurisdictions

The Panel will next consider how statutes similar to the UCA have been interpreted by courts and commissions in other jurisdictions.

With regard to other jurisdictions, the issues for the Panel to determine are:

- Should the rulings of other jurisdictions guide the Panel in its decision?
- If so, are the circumstances of those rulings sufficiently similar to the circumstances in this hearing?

There were five rulings from five Canadian jurisdictions (Ontario, Nova Scotia, New Brunswick, Alberta and Manitoba) relied on by the parties to support their positions. While not bound by decisions in other jurisdictions, the Panel believes they could be helpful in providing guidance if the cases were sufficiently similar. These are examined in some detail to determine whether they have application and provide direction for this jurisdiction.

7.1.4.1 Ontario

BCOAPO, in its September 26, 2016 final argument, put forth the Ontario case law relevant to BCOAPO’s proposals for low-income rates.²⁶¹ This case law is described in the following paragraphs.

The Ontario case originated in an application to the Ontario Energy Board (OEB) by Enbridge Gas Distribution Inc. (EGD) for approval of EGD’s 2007 gas distribution rates based simply upon traditional “cost of service” rate-making principles. The Appellant Low Income Energy Network (LIEN) intervened in the application before the OEB, arguing that without a rate affordability program, the interests of low-income consumers were not protected.

Specifically, LIEN’s position was that the supply of natural gas (or other source of energy) serves to meet basic human needs such as warmth from heating and the generation of power and those who cannot afford to use natural gas as a source of energy may therefore be placed at a significant disadvantage. LIEN proposed that the OEB accept the following as an issue in the EGD proceeding:

²⁶¹ BCOAPO Final Argument dated September 26, 2016, pp. 38-42.

Should the residential rate schedules for EGD include a rate affordability assistance program for low-income consumers? If so, how should such a program be funded? How should eligibility criteria be determined? How should levels of assistance be determined?

The majority of the OEB held that it did not have the jurisdiction to implement the LIEN proposal, noting that such a scheme would require a consumer rate class based upon income characteristics and would implicitly require subsidization of this new class by other rate classes.

In LIEN's appeal of the OEB's decision, the Ontario Superior Court of Justice undertook a statutory interpretation analysis of the OEB's jurisdiction. The provision at issue of the *Ontario Energy Board Act* was section 36, which states:

36 (1) No gas transmitter, gas distributor or storage company shall sell gas or charge for the transmission, distribution or storage of gas except in accordance with an order of the Board, which is not bound by the terms of any contract.

(2) The Board may make orders approving or fixing just and reasonable rates for the sale of gas by gas transmitters, gas distributors and storage companies, and for the transmission, distribution and storage of gas.

(3) In approving or fixing just and reasonable rates, the Board may adopt any method or technique that it considers appropriate.

The Appellant Advocacy Centre for Tenants-Ontario argued that the OEB had jurisdiction because the OEB's authority to fix "just and reasonable rates" by adopting "any method or technique it considers appropriate" is very broad. The OEB, on the other hand, argued that its jurisdiction was limited to a rate setting process based on cost causality.

In its legal analysis, the Ontario Superior Court of Justice (OSCI) considered the factors including:

- Section 36 replaced a repealed provision (s.19) which explicitly proscribed a traditional cost-of-service basis to rate setting (para. 23);
- The Board [OEB] had authorized specific funding for low-income consumers for "Demand Side Management Programs" (para. 26);
- The Board on occasion had reduced a significant rate increase because of so called "rate shock" by spreading the increase over a number of years. The OSCJ observed that "although this does not in itself suggest an unequal approach as between residential consumers it does indicate that the Board considers it has jurisdiction to take "ability to pay" into account in rate setting" (para. 27);
- Section 79 of the Act [*Ontario Energy Board Act* (OEB Act)] explicitly authorizes the Board [OEB] to provide rate protection for rural or remote consumers of an electricity distributor. The OSCJ observed "rate protection" through s. 79 operates as a subsidy paid by some of Ontario's residential electricity consumers for the benefit of others and represents a departure from the principle of cost causality being applied on the same basis to all consumers within a given class (i.e., residential, commercial and industrial) (para. 31); and

- The Board [OEB] is charged under s. 2 of the *Act* [OEB Act] with protecting “the interests of consumers with respect to prices” (para. 34).

The OSCJ ultimately concluded that the OEB had the jurisdiction to take into account “ability to pay” in setting rates for reasons including:

- “...the expansive wording of s. 36(2) and (3) of the statute and giving that wording its ordinary meaning, having considered the purpose of the legislation within the context of the statutory objectives for the Board seen in s. 2, and being mindful of the history of rate setting to date in giving efficacy to the promotion of the legislative purpose” (para. 61);
- “...the interpretation is appropriate taking into account the criteria articulated in *Driedger*, above, namely it complies with the legislative text, it promotes the legislative purpose and the outcome is reasonable and just” (para. 62);
- While cost of service remains a root principle in rate setting, the Board need not stop there. It is authorized to employ “any method or technique that it considers appropriate” to fix “just and reasonable rates.” Further, the Board must determine what are “just and reasonable rates” within the context of the objectives set forth in s. 2 of the *Act*. Objective #2 therein speaks to protecting “the interests of consumers with respect to prices” (paras. 52-53);
- “...so long as the global amount of return to the utility based upon a “cost of service” analysis is achievable, then the rates/prices (and the methods and techniques to determine those rates/prices) to generate that global amount is a matter for the Board’s discretion in its ultimate goal and responsibility of approving and fixing “just and reasonable rates”” (para. 59).²⁶²

Intervener arguments

BCOAPPO submits that section 36 of the OEB Act largely accords with section 60 of the UCA, which states that the Commission “must consider all matters that it considers proper and relevant affecting the rate” (s.60 (1) (a)) and “may use any mechanism, formula or other method of setting the rate that it considers advisable” (s.60 (1) (b.1)). Further, many of the Ontario Superior Court of Justice’s considerations in determining the OEB’s jurisdiction are equally applicable to determining the Commission’s jurisdiction.²⁶³

FortisBC argues that the Ontario decision, upon which BCOAPPO heavily relies, is distinguishable on the basis of material differences in the legislation. It argues:

1. Section 36(3) of the *Ontario Energy Board Act, 1998*, (OEB Act) had been enacted to replace a provision that the Ontario Divisional Court described as requiring “a traditional cost of service analysis in very prescriptive terms.”
2. The *OEBA* doesn’t contain any provision comparable to section 59 of the UCA.
3. The *OEBA* contains a provision (s. 2.2) that states that the OEB is to be “guided by” this objective “To protect the interests of consumers with respect to prices and the reliability

²⁶² BCOAPPO Final Argument, pp. 38-39.

²⁶³ *Ibid.*, p. 41.

and quality of gas services.” The Court relied on this statutory objective and the UCA contains no equivalent provision.²⁶⁴

In response to FortisBC, BCOAPO replies that *Advocacy Centre for Tenants-Ontario v Ontario Energy Board* is distinguishable:

- While the Ontario Superior Court of Justice considered the factor that s.36 replaced s.19 during its statutory interpretation analysis, this factor was not determinative and the Ontario Superior Court of Justice did not indicate that it gave this factor special weight in reaching its conclusions. BCOAPO has already provided an overview of the wide range of factors considered by the Ontario Superior Court of Justice in BCOAPO’s Final Submissions dated September 24, 2016.
- While BCOAPO agrees that the *OEB* does not contain language prohibiting “preferential rates,” the *OEB* also does not contain language prohibiting “discriminatory rates.” It can be assumed that while the terms preferential and discriminatory do not appear in the *OEB*, the Ontario Energy Board applies the fundamental principles against unduly discriminatory and unduly preferential rates and does not have the jurisdiction to enact unduly discriminatory and unduly preferential rates.²⁶⁵

BC Hydro notes that the Ontario Court of Appeal had before it the Nova Scotia decision (discussed in the following section), and expressly distinguished it on the basis of a single provision in the Ontario statute that did not appear in the Nova Scotia statute:

Power of Board

36(3) In approving or fixing just and reasonable rates [of gas distribution utilities], the Board may adopt any method or technique that it considers appropriate [emphasis added].²⁶⁶

However, BC Hydro points out that “[d]espite the Ontario Court of Appeal’s 2008 decision regarding the OEB’s jurisdiction to implement a rate affordability program, the OEB recently advised the Province that it required further amendments to its legislative regime in order to implement a more comprehensive rate relief program for low-income customers.” The Province of Ontario responded in due course and section 79.2 of the OEB Act now states, in part:

79.2(1) The Board may, in approving just and reasonable rates for a [electricity] distributor, make provision for rate assistance to rate-assisted customers having regard to their economic circumstances.

(2) Where the Board makes provision for rate assistance in accordance with subsection (1), the rates set and the related activities undertaken by the Board may be referred to as the “Ontario Electricity Support Program” in English and “Programme ontarien d’aide relative aux frais d’électricité” in French.

99.2(4) The Board may, by order or by establishing or amending a code, identify one or more classes of consumers as rate-assisted customers.²⁶⁷

²⁶⁴ FortisBC Final Argument, pp. 6-7.

²⁶⁵ BCOAPO Reply Argument, pp. 51-52.

²⁶⁶ BC Hydro Final Argument, p. 100.

MoveUP argues that “[i]n this case, the majority of the three person panel sitting at the Ontario Superior Court of Justice found that OEB had the jurisdiction to establish a rate affordability assistance program for low income gas ratepayers. While, as BC Hydro notes, the Court found that the Board was an economic regulator, it also found that through section 36(3) of the *Ontario Energy Board Act 1998*, the Board was authorized to fix just and reasonable rates using “any method or technique that it consider[ed] appropriate.”

MoveUP further argues that “[t]his Commission Panel, through the operation of section 23 has the broad jurisdiction to make orders about a variety of matters including rates and ‘other matters it considers necessary or advisable for the safety, convenience, or service of the public’.”

Additionally, MoveUP argues that “through the UCA’s 60(1)(b.1) the Commission, ‘may use any mechanism, formula or other method of setting the rate that it considers advisable’. Following the reasoning of ATCO/OEB and the wording of these two sections, this Panel has indeed been granted the jurisdiction to set low income rates. While these sections do not exactly mirror the wording of the Ontario legislation, they are substantially similar in both substance and context and they have the same effect: a broad jurisdiction to approve low income rates using whatever mechanism, formula or other method of setting rates the Commission considers advisable should the Commission also find them to be just, reasonable, and not unduly discriminatory.”²⁶⁸

With regard to BCOAPO’s reliance on OEB decisions to support its low-income programs being within the jurisdiction of the Commission in British Columbia as BCOAPO notes at page 41 of its final argument the legislation in Ontario contains a provision explicitly setting out its “interests of consumers” objection which has been extended to enable creation of low income residential customers.²⁶⁹

BCOAPO argues the following:

...while the *UCA* does not have an “objectives” section, it clearly identifies the requirement that the Commission regulate in the “public interest” and requires that public utilities provide “a service to the public that the commission considers is in all respects adequate, safe, efficient, just and reasonable.” Further, there are numerous instances of Hansard cited in both BCOAPO and BC Hydro’s submissions where government MLAs speak to the public interest, consumer protection, and ensuring low prices. Further, protecting customers with respect to price is a traditional principle in rate setting. In *Advocacy Centre for Tenants-Ontario v Ontario Energy Board*, the Ontario Superior Court of Justice observed:

[39] The Board’s regulatory power is designed to act as a proxy in the public interest for competition in view of a natural gas utility’s geographical natural monopoly. Absent the intervention of the Board as a regulator in rate-setting, gas utilities (for the benefit of their shareholders) would be in a position to extract monopolistic rents from consumers, in particular, given a relatively inelastic demand curve for their commodity. Clearly, a prime purpose of the *Act* and the Board is to balance the interests of consumers of natural gas with those of the natural gas suppliers. The

²⁶⁷ BC Hydro Final Argument, pp. 100-101.

²⁶⁸ MoveUP Final Argument, pp. 15-16.

²⁶⁹ BCOAPO Final Argument dated September 26, 2016, p. 41.

Board's mandate through economic regulation is directed primarily at avoiding the potential problem of excessive prices resulting because of a monopoly distributor of an essential service.²⁷⁰

BCOAPO further argues: "In viewing the legislation, Hansard, and traditional rate setting principles holistically, BCOAPO asserts it is clear there is legislative intent to protect consumers with respect to prices. It is trite to say that of course the Commission can consider customers. They can and do, for example when considering potential rate shock."²⁷¹

Commission determination

The Panel finds that the similarities between the legislation in BC and Ontario are insufficient to provide guidance to the Panel.

The *Ontario Energy Board Act 1998* (OEB Act) authorizes the OEB to fix just and reasonable rates using "any method or technique that it considered appropriate." On the face of it, the UCA has a sufficiently similar provision to section 36(3) of the OEB Act—namely section 60(1)(b.1). Section 36(3) appears in the OEB Act, under the heading titled "*Gas Regulation*" and reads:

In approving or fixing just and reasonable rates, the Board may adopt any method or technique that it considers appropriate.

Section 60(1)(b.1) appears in the UCA under the heading "*Setting of Rates*" and reads:

the commission 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.

However, regardless of these similarities, the Ontario case can be distinguished from the UCA because of the lack of a "fair, reasonable and not unduly discriminatory" requirement in the OEB Act similar to sections 59-60 of the UCA. The equivalent section in the OEB Act, section 19, which was described by the OSCJ as "explicitly proscribing a traditional cost-of-service basis to rate setting" had been repealed. Further section 2 of the OEB Act charges the OEB with protecting the interests of consumers with respect to prices. Therefore, in spite of the similarities between section 60(1)(b.1) in the UCA and section 36(3) in the OEB Act, the Panel is persuaded the differences in legislation are significant and cannot be relied upon to provide guidance on this issue.

BCOAPO argues that it can be assumed that while the terms preferential and discriminatory do not appear in the OEB Act, the OEB applies the fundamental principles against unduly discriminatory and unduly preferential rates and does not have the jurisdiction to enact unduly discriminatory and unduly preferential rates. However, given the discussion above concerning section 2 and section 36 of the OEB Act, there is no evidence to support this assumption. In fact, there is evidence of a statutory objective that provides the OEB with jurisdiction to set low-income rates and direct other low-income programs.

²⁷⁰ BCOAPO Reply Argument, p. 45.

²⁷¹ Ibid.

Although the section headings are not determinative, the Panel notes that, by virtue of the section it appears within, section 36(3) appears to be intended only for gas distribution utilities. Furthermore, the OEB recently advised the Province that it required further amendments to its legislative regime in order to implement a more comprehensive rate relief program for low-income customers, as opposed to the rate affordability program approved by the Appeal Court. The Province responded by enacting section 79.2(1)1, which reads:

The Board may, in approving just and reasonable rates for a distributor, make provision for rate assistance to rate-assisted consumers having regard to their economic circumstances.

and 79.2(2) which reads:

Where the Board makes provision for rate assistance in accordance with subsection (1), the rates set and the related activities undertaken by the Board may be referred to as the “Ontario Electricity Support Program” in English and “Programme ontarien d’aide relative aux frais d’électricité” in French. 2015, c. 20, Sched. 31, s. 1.

7.1.4.2 Nova Scotia

BCOAPO, in its September 26, 2016 final argument, puts forth the Nova Scotia case law relevant to BCOAPO’s proposals for low-income rates.²⁷² This case law is described in the following paragraphs.

In Nova Scotia, the Utility and Review Board’s rate-setting jurisdiction is set out in sections 44 and 67 of the *Public Utilities Act*. Section 44 states:

The Board may make from time to time such orders as it deems just in respect to the tolls, rates and charges to be paid to any public utility for services rendered or facilities provided, and amend or rescind such orders or make new orders in substitution therefor.

Section 67(1) states:

All tolls, rates and charges shall always, under substantially similar circumstances and conditions in respect of service of the same description, be charged equally to all persons and at the same rate, and the Board may by regulation declare what shall constitute substantially similar circumstances and conditions.

The Nova Scotia Court of Appeal (NSCA) upheld the Utility and Review Board’s interpretation of section 67 of the *Public Utilities Act* as prohibiting the charging of different rates to consumers receiving a substantially similar service.

The NSCA rejected the appellant’s argument that section 67(1) does not prohibit an income-based rate assistance program because low-income consumers do not have “substantially similar circumstances” to higher income consumers, stating: [24] With respect, the factum’s submission misinterprets s. 67(1). The provision refers to “substantially similar circumstances and conditions ***in respect of service of the same description.***”

²⁷² BCOAPO Final Argument dated September 26, 2016, pp. 38-42.

[emphasis included in source document] To justify a rate difference, the relevant dissimilarity is not in customers' incomes. It is in the service from NSP [Nova Scotia Power]. The Board accepted, and there is no basis to question, that NSP provides substantially similar electrical service whatever the domestic customer's income.²⁷³

Intervener arguments

BCOAPPO submits that the decision *Dalhousie Legal Aid Service v Nova Scotia Power Inc.* is not applicable to the scope of the Commission's jurisdiction.²⁷⁴ BCOAPPO argues that "Section 59(2)(b) of the UCA is distinguishable from Section 69 of the Public Utilities Act because of an important difference in the wording." BCOAPPO explains that section 59(2)(b) refers to "substantially similar circumstances and conditions for service of the same description, whereas section 67 refers to "substantially similar circumstances and conditions in respect of service of the same description." BCOAPPO therefore argues that the "wording in section 59 can be interpreted as prohibiting public utilities from charging different rates for the same service provided to persons under substantially similar circumstances and conditions."²⁷⁵

BCOAPPO argues that section 59 of the UCA "does not prohibit the charging of different rates for the same service provided to persons who are not under substantially similar circumstances and conditions. Further, the title to s. 67 is 'Equal rates and charges for similar services,' is more prescriptive than the title of s. 59, which is 'Discrimination in rates'."²⁷⁶ Finally, BCOAPPO submits that section 59(1) of the UCA "must be read in the context of the scheme of the Act, and in particular sections 23, 38, 59 and 60 must be read together. In Nova Scotia, the statute in general was much more prescriptive."²⁷⁷

Regarding the Nova Scotia example, MoveUP argues "[w]ith respect, this case is distinguishable from the one before this Panel due to the substantial and substantive differences in the wording of Nova Scotia's section 67 and British Columbia's sections 59 as well as the effect of British Columbia's section 60." MoveUP argues that in the *Dalhousie* case, the Court of Appeal "expressly relied on the clear wording of section 67 (1)" and refers to the following statement:

Section 67(1) is not ambiguous: "rates ... shall always ... be charged equally to all persons and at the same rate" in substantially similar "circumstances and conditions in respect of service of the same description." The Board cannot reduce the rate to a low income customer who receives the same service as a high income customer. There is no latitude for the interpretive presumption.²⁷⁸

MoveUP argues that unlike Nova Scotia's *Public Utilities Act* (PUA), "nowhere in the UCA there is there an absolute requirement that rates under substantially similar circumstances and conditions in respect of service of the same description always be charged equally all persons, only that the rates charged must be regularly and uniformly extended to all persons under substantially similar circumstances and conditions for service of the

²⁷³ BCOAPPO Final Argument dated September 26, 2016, p. 43.

²⁷⁴ Ibid.

²⁷⁵ Ibid.

²⁷⁶ Ibid., pp. 43-44.

²⁷⁷ Ibid.

²⁷⁸ MoveUP Final Argument, p. 14.

same description and that those rates must not constitute an ‘unjust, unreasonable, unduly discriminatory or unduly preferential rate[s] for a service provided by it in British Columbia’.”²⁷⁹

In FortisBC’s view, the Nova Scotia decision is the “most directly applicable” case. BCOAPO has argued about the distinction between “conditions for services” and “conditions in respect of services”, FortisBC responds by stating this is a “distinction without a difference”.²⁸⁰

Commission determination

The Panel finds that there are sufficient similarities in the legislation in BC and in Nova Scotia to provide guidance to the Panel.

The key issue is whether the wording of section 59(2)(b) of the UCA is distinguishable from section 69 of the *Public Utilities Act*. Section 59(2)(b) refers to “substantially similar circumstances and conditions for service of the same description, whereas section 67 refers to “substantially similar circumstances and conditions in respect of service of the same description.”

Any distinction appears to turn on the difference between the phrase “for services”, and the phrase “in respect of services”. BCOAPO characterizes these phrases as substantially different. The Panel disagrees. The Oxford English Dictionary²⁸¹ defines ‘for’ as: “Affecting, with regard to, or in respect of.” Therefore in the Panel’s view there is no substantial or material difference between the phrase “for services”, and the phrase “in respect of services”.

Accordingly, the Panel agrees that this decision is directly applicable to the issue of the Commission’s jurisdiction under the UCA. Further, our finding in section 7.1.2.2 of this decision that the UCA grants no jurisdiction to approve low income rates in the absence of an economic or cost of service justification is consistent with the determination of the Nova Scotia Board.

7.1.4.3 New Brunswick and Alberta

BC Hydro submits that each of the Nova Scotia Utility and Review Board (NSUARB) the New Brunswick Energy and Utilities Board (NBEUB), and the Alberta Energy and Utilities Board (AEUB) have determined that in the absence of express language authorizing the particular utility board to set rates according to customers’ income or ability to pay rather than according to the cost of serving those customers, low-income rates are unduly preferential and/or unjustly discriminatory.²⁸²

²⁷⁹ MoveUP Final Argument, p. 14.

²⁸⁰ FortisBC Final Argument, pp. 5-6.

²⁸¹ <https://en.oxforddictionaries.com/definition/for>

²⁸² BC Hydro Final Argument, p. 95.

NBEUB stated:²⁸³

The Board is cognizant of its legislative authority under the Electricity Act, which requires the Board to approve rates that are just and reasonable. The Board is an economic regulator and its role is to establish classes of service and rates for each class that are appropriate having regard to the costs that each class imposes on DISCO [distribution company]. Just and reasonable rates mean that once the specific rates are established they should apply equally to all customers in the same class. All customers who qualify for a particular service should pay the same rate for that service and there should be no undue discrimination between customers.

The AEUB stated:²⁸⁴

The Board finds the following characterization of lifeline rates to be helpful:

While the lifeline concept has been subject to various interpretations, the major premise of those advocating lifeline rates is that low-income and elderly customers can no longer pay for “basic” utility services, and, since such basic services are both “essential” and inelastic, they should be provided at “an ‘affordable rate, even if that rate is below the cost of service’.”

Lifeline rates are a specific case of rates based not on economic principles of regulation such as cost of service, but on the social principle of a customers’ “ability to pay”.

While the Board has some sympathy for the residents of the institutional customers represented by the CCG, the Board considers that a specific tariff application is an unsuitable forum within which to address the social issues raised by programs such as lifeline rates. The Board also recognizes the administrative complexities that could result from the implementation of such a program in a utility’s billing system.

Further, in the absence of express language in the EUA authorizing the Board to set rates according to customers’ ability to pay, rather than according to the cost of serving those customers, lifeline rates may contravene section 121(2)(b) of the EUA. That section requires the Board to ensure that a tariff is not unduly preferential, arbitrarily or unjustly discriminatory.

Therefore, the Board is not persuaded that it would be appropriate to implement lifeline rates for EEC or EPC.

BCOAPO argues that the decisions from the NBEUB and the former AEUB have “significantly less precedential value than the Ontario Superior Court of Justice decision (which was confirmed by the Ontario Court of Appeal)” because they precede the Ontario decision.²⁸⁵

BCOAPO also submits that the NBEUB’s decision “does not indicate whether a comprehensive bill assistance program was put before the Board, or whether there was a cost of service or efficiency basis to the rate affordability program – it appears as though the only consideration was ability to pay.” BCOAPO further submits:

²⁸³ *New Brunswick Power Distribution and Customer Service Corporation’s Customer Care Policies*, 29 January 2007, pp. 12-13.

²⁸⁴ Decision 2004-066 Re: *ENMAX Power Corporation 2004 Distribution Tariff Application*, 13 August 2004, section 9.2.6, pp 160-161.

²⁸⁵ BCOAPO Final Argument dated October 11, 2016, p. 38.

“The NBEUB’s jurisdictional analysis consists of one double-spaced page stating that it has no jurisdiction to offer a bill assistance program to low income ratepayers, and the Board provides no summary of the jurisdictional arguments that were made before it.”²⁸⁶

Panel discussion

In the Panel’s view, a plain reading of the sections of the decisions excerpted above supports BC Hydro’s (and others’) position that “lifeline rates”, in the absence of an economic or cost of service justification, are unduly discriminatory.

With respect to BCOAPO’s arguments that these decisions have “significantly less preferential value” because they precede the Ontario decision, the Panel does not agree that the fact that these decisions predate the Ontario decision has relevance because, as we have discussed in section 7.1.3.1 of this decision, the regulatory context in Ontario differs. There is no requirement that rates set by the OEB not be unduly discriminatory.

However, the Panel acknowledges BCOAPO’s argument that the NBEUB decision does not indicate whether there was an economic or cost of service or efficiency basis to the rate affordability program. Accordingly, the Panel considers the NBEUB decision to be less relevant to this decision.

7.1.4.4 Manitoba

On July 24, 2015, the Manitoba Public Utilities Board (MPUB) decided in Manitoba Hydro’s 2014/15 and 2015/16 General Rate Application that it had the jurisdiction to order bill assistance for low-income Manitoba Hydro residential ratepayers. The need for a low-income bill affordability program was addressed in that proceeding by the Green Action Centre (GAC), who noted that Manitoba Hydro had not sufficiently investigated or addressed the issue of non-payment resulting from unaffordable bills. GAC recommended that the MPUB direct Manitoba Hydro to establish a collaborative process to address bill affordability for low-income ratepayers.²⁸⁷

In the ensuing decision, the MPUB concluded that it had the jurisdiction to order Manitoba Hydro to initiate a collaborative process to develop a bill affordability program based on the broad language found in section 26(4) of the *Manitoba Crown Corporations Public Review and Accountability Act*:

The Board notes that while Manitoba Hydro is regulated on a cost of service basis, section 26(4) of the Crown Corporations Public Review and Accountability Act specifically authorizes the Board to consider “any compelling policy considerations that the Board considers relevant to the matter.” In that respect, the Board’s jurisdiction is similarly broad as that of the Ontario Energy Board pursuant to The Ontario Energy Board Act, 1998. Subsection 26(3) of the Crown Corporations Public Review and Accountability Act further stipulates that The Public Utilities Board Act applies with any necessary changes to the Board’s ratesetting mandate. As such, rates are not only required to meet the requirements of subsection 39(1) of the Manitoba Hydro Act but must also be “just and reasonable.” In the Board’s view, affordability is a factor to consider when setting just and reasonable rates.²⁸⁸

²⁸⁶ Ibid.

²⁸⁷ BCOAPO Final Argument dated September 26, 2016, p. 45.

²⁸⁸ BC Hydro Final Argument, pp. 105-106.

Intervener arguments

BCOAPO states that to the extent that the Commission seeks to consider the decisions of other Canadian regulators concerning low income bill affordability programs, BCOAPO submits that the MPUB regulates in a context far more comparable to BC than either New Brunswick or Alberta, and, as BCOAPO has already noted, recently determined that it had jurisdiction to order the development of a bill affordability program.²⁸⁹

BCOAPO submits that the Commission's jurisdiction is also "similarly broad" as the OEB and the MPUB, as all three administrative tribunals have enabling statutes that provide them with the discretion to depart from a pure cost of service analysis. In particular, all three administrative tribunals are governed by similarly worded provisions authorizing them to fix just and reasonable rates by adopting "any method or technique that it considers appropriate [in rate setting]" (s.36 of the OEB Act); considering "all matters that it considers proper and relevant affecting the rate" and using "any mechanism, formula or other method of setting the rate that it considers advisable" (s.60 of the UCA); or considering "any compelling policy considerations that the Board considers relevant to the matter" (s.26(4) of the *Crown Corporations Public Review and Accountability Act*).²⁹⁰

BC Hydro submits that the decision from the MPUB "distinguishes the *Dalhousie* case in the same manner as it was distinguished in Ontario." BC Hydro further submits:

It is plain that the *Manitoba Hydro* decision can be distinguished from the situation now before the Commission on the basis of differing legislation. In particular there is no equivalent to subsection 26(4) of the *Manitoba Crown Corporations Public Review and Accountability Act* which authorizes the MPUB to consider "any compelling policy consideration that [it] considers relevant" when setting rates, and there is no equivalent to subsection 26(3) which ensures that policy-driven decision-making can trump what would otherwise be the MPUB's conventional rate-making mandate.²⁹¹

Commission determination

The Panel finds that there are not sufficient similarities between the legislation in BC and Manitoba to provide guidance to the Panel.

BCOAPO argues that the ability of the MPUB to consider "any compelling policy considerations that the Board considers relevant to the matter" equivalent to the Commission's ability to "use any mechanism, formula or other method of setting the rate that it considers advisable." While these phrases could be interpreted to be somewhat similar, the Panel is persuaded by BC Hydro's argument that "there is no equivalent to subsection 26(3) which ensure that policy-driven decision-making can trump what would otherwise be the MPUB's conventional rate-making mandate. In addition, the Panel notes the section on legislative intent discussed previously where it was stated that section 60 of the UCA was intended for performance based rate setting, the similarities all but disappear, at least in the context of low-income rates.

²⁸⁹ BCOAPO Final Argument, p. 38.

²⁹⁰ Ibid., p. 48.

²⁹¹ BC Hydro Final Argument dated September 26, 2016, pp. 106-107.

Summary of cases from other jurisdictions

The Panel finds that in the case of Ontario and Manitoba, where there was support for low-income rates in the absence of an economic or cost of service basis, there is insufficient similarity in the jurisdictional context to be able to be guided by those decisions. However, in the case of Nova Scotia, New Brunswick and Alberta, where there was no support for low-income rates in the absence of an economic or cost of service basis, there was sufficient similarity to provide the Panel guidance. Therefore, regardless of the weight applied to any of these findings, there is a clear directional guidance that indicates that there is no support for low-income rates in the absence of an economic or cost of service basis in jurisdictions with similar regulatory contexts.

7.1.5 Summary of determinations on jurisdictional issues

In summary:

BCOAPO agrees with BC Hydro that the Commission does not have explicit jurisdiction under the UCA to consider ability to pay. Rather, BCOAPO argues that the UCA provides the Commission with an explicit grant of the discretion to do so.²⁹²

MoveUp argues that “[i]n BCOAPO's Final Submission, counsel has properly situated [its] rate setting jurisdiction within the greater context of the BCUC's general supervision of public utilities (per section 23 of the *UCA*) and the requirement that public utilities must provide, “service to the public that the commission considers in all respects adequate, safe, efficient, just and reasonable.” In this case, that context as well as an analysis of the wording of the rates sections clearly define the Commission's jurisdiction as one that includes the lawful ability to approve low income rates provided they are fair, just and reasonable.”²⁹³

BC Hydro argues that “BCOAPO fails to offer any evidence or indeed much argument regarding a legislative intent in regard to Basic low income Jurisdiction.” BC Hydro submits that the extracts from Hansard included in its final argument indicate clearly a legislative intent to not empower the Commission with such jurisdiction, while “[t]he BCOAPO offers nothing comparable, except a short reference to Hansard from 1980.”

CEC states that it “has reviewed the submissions of BC Hydro at paragraphs 180 through to 254 and adopts and supports this comprehensive review of the jurisdiction of the Commission under the *Utilities Commission Act* and submits that BC Hydro has properly and comprehensively demonstrated that the Commission has no jurisdiction to approve low income rates as argued by the BCOAPO.”²⁹⁴

FortisBC submits that, including for the reasons stated at paragraphs 180-254 (with which FortisBC generally agrees) of BC Hydro's Final argument dated September 26, 2016, the Commission does not

²⁹² BCOAPO Final Argument dated October 11, 2016, pp. 29-30

²⁹³ MoveUp Final Argument, p. 9

²⁹⁴ CEC Final Argument, p. 52.

have the jurisdiction to establish or set special, preferential rates for low income residential customers per se, in the absence of an appropriate non-status justification.²⁹⁵

AMPC takes no position on whether the Commission has jurisdiction to order the particular low income rates proposed by BCOAPO because AMPC's members are not affected by a determination of the intra-class constituencies for the residential rate class.²⁹⁶

BCSEA-SCBC urge the Commission to "grasp the nettle" – to state clearly that the Utilities Commission has a public interest mandate to recognize and take steps within its jurisdiction to address the problem. The Commission has an opportunity in its decision in this proceeding to confirm that its traditional role to protect the interests of ratepayers includes protecting the interests of low-income ratepayers in receiving service from the regulated public utility." However, it makes no specific argument on jurisdictional issues.²⁹⁷

Commission determination

The Panel has reviewed the summary arguments outlined above, and above has also reviewed the arguments in detail and made determinations where appropriate. Specifically, we have considered sections 23, 28, 59 and 60 of the UCA, along with statements made in the legislature and rulings on similar issues by various tribunals and courts in other Canadian jurisdictions. **The Panel finds there is no evidence that the UCA provides the Commission with the jurisdiction to approve a low income rate in the absence of an economic or a cost of service basis reason.**

We next examine BCOAPO's specific low-income proposals to determine whether a specific economic or cost of service basis reason exists to approve a low-income rate.

7.2 Overview of BCOAPO's low-income rate proposals

BCOAPO requests the Commission to order BC Hydro to implement a number of proposals to assist low-income ratepayers who are having "increasing difficulty paying their electricity bills in an environment where electricity rates continue to rise while many people's incomes have stagnated."²⁹⁸

Specifically, BCOAPO is proposing:

- An essential services usage block (ESUB) rate for qualified low-income ratepayers;
- A crisis intervention fund (CIF) for qualified low-income ratepayers who are facing disconnection;
- Amendments to the Electric Tariff to allow for rules specific to qualified low-income customers and residential ratepayers more generally, such as waiver of late payment charges for low-income customers, a reduction and delay in application of late payment charges for all residential customers,

²⁹⁵ FEI Final Argument, p. 1.

²⁹⁶ AMPC Final Argument, p. 17.

²⁹⁷ BCSEA Final Argument, p. 52.

²⁹⁸ BCOAPO Final Argument dated September 26, 2016, p. 2.

and waiver of reconnection charges, account charges, and security deposits for low income customers, among other amendments;

- Adoption by BC Hydro of several business practices, such as offering increased flexibility in installment plans, conducting a customer segmentation analysis, engaging in enhanced data reporting, and setting up a low-income customer assistance unit; and
- An increase in the number of Energy Conservation Assistance Program (ECAPs) it carries out for eligible low-income ratepayers.²⁹⁹

7.3 ESUB rate

7.3.1 Proposed rate structure

The proposed ESUB rate would be offered to low-income residential ratepayers³⁰⁰ as part of its Electric Tariff and eligible ratepayers would receive the first 400 kWh of service each month at a discount of \$0.04/kWh. The ESUB rate would not otherwise affect the Tier 1 and Tier 2 thresholds of BC Hydro's residential inclining block rate. BCOAPO proposes the cost of the ESUB rate be spread over all residential consumption.

In the first year, BCOAPO recommends that BC Hydro offer the ESUB rate to BC Ministry of Social Development and Social Innovation (MSDSI) assistance recipients and expand access to the ESUB rate to all customers who have incomes at or below Statistics Canada's pre-tax LICO in future years.

In the alternative, should the Commission determine that it requires further information prior to ordering BC Hydro to implement a rate for low-income residential customers, BCOAPO asks that the Commission direct BC Hydro to prepare and file, within six months of the date of the Commission's order, a proposed rate that provides a discount to low-income customers for an initial block of electric service for each month or billing period or similar rate structure.³⁰¹

In its intervenor evidence, BCOAPO's low-income rate design expert, Mr. Colton, stated the proposed 400 kWh block usage is appropriate because:

- 400 kWh is roughly in line with BC Hydro's definition of low-consumption as customers whose use varies between 370 and 380 kWh per month;³⁰²
- The 400 kWh usage block accounts for the higher usage in single-family detached homes while not over compensating the lower usage of apartments and duplex/condo residents;³⁰³
- A \$0.04 per kWh discount provides "meaningful assistance to low-income customers without imposing unreasonable burdens" on non-participating residential customers;³⁰⁴

²⁹⁹ Ibid.

³⁰⁰ Ibid., p. 4, BCOAPO defines a "qualified low income customer" for the purposes of its proposals as residential ratepayers who are at or below Statistics Canada's LICO. The only exception to this definition is that BCOAPO is asking that expanded offerings of ECAP be available to ratepayers who have incomes at or below LICO plus 30 percent.

³⁰¹ Ibid., p. 4.

³⁰² Exhibit C2-12, Direct Testimony of Roger Colton, p. 15, citing Exhibit B-1, at Appendix C-3B, p. 126 of 609.

³⁰³ Ibid., p. 16.

³⁰⁴ Ibid., p. 19.

- Depending on consumption and other factors the proposed discount would provide a bill reduction of between \$9 and \$16 per month on low-consumption, low-income bills;³⁰⁵ and
- The proposed ESUB rate will mitigate but not protect low income customers against rate increases.³⁰⁶

7.3.2 Cost of ESUB

The costs associated with the proposed ESUB rate include: the rate impact of the ESUB, ongoing costs, and start-up costs. Mr. Colton states the bill impact for non-participating residential customers at median usage is \$1.0 per month³⁰⁷ and at 100 percent low-income customer participation rate, the ESUB rate would impose an annual cost of \$26.9 million on non-participating residential customers.³⁰⁸ Mr. Colton argued a more reasonable participation rate is 50 percent³⁰⁹ based on experience with similar programs.³¹⁰ BCOAPO stated at this 50 percent level of participation, the cost would be 50 percent lower.³¹¹ BC Hydro believes implementation of an eligibility process would cost a minimum of \$1.25 million and that annual operating expenditures would be at least \$0.55 million per year.³¹²

7.3.3 Regulatory justification

BCOAPO submits the regulatory justification for its proposed ESUB rate stands on three pillars:

1. Improved cost-reflectivity;
2. Improved efficiency; and
3. Improved affordability.

BCOAPO argues any one of these pillars is sufficient to merit approval of the ESUB rate and the support provided by all three pillars provides a “rock solid basis” to support the approval of the ESUB proposal.³¹³

7.3.3.1 Improved cost reflectivity

BCOAPO cites BC Hydro evidence stating there is a statistically significant relationship indicating electricity consumption varies with household income.³¹⁴ With reference to Mr. Colton’s testimony that high-use residential customers tend to have lower load factors, BCOAPO submits that by implication, lower-use customers tend to have higher load factors. BCOAPO refers to BC Hydro evidence related to the higher relative cost to serve low-load factor customers and that low-use customers have lower peaks which it asserts indicates low-use, high-load factor customers impose lower costs on the BC Hydro system.³¹⁵ BCOAPO submits that this is supported by BC Hydro data which shows:

³⁰⁵ Ibid., p. 19.

³⁰⁶ Ibid., p. 19.

³⁰⁷ Ibid., p. 26.

³⁰⁸ Ibid., Schedule RDC-2.

³⁰⁹ Ibid., p. 32.

³¹⁰ Exhibit C2-20, CEC IR 17.1.

³¹¹ Exhibit C2-18, BCSEA IR 9.5.

³¹² Exhibit B-31, p. 2.

³¹³ BCOAPO Final Argument dated September 26, 2016, p. 54.

³¹⁴ Exhibit B-5, BCOAPO IR 1.111.1.

³¹⁵ BCOAPO Final Argument dated September 26, 2016, p. 54.

- Demand costs, which are allocated using the 4 coincident peak (4CP) and non-coincident peak (NCP) factors, are the most substantial part of rates;
- Low-use customers have lower peaks using both the 4CP and NCP factors, combined with higher load factors;
- The low use customers impose fewer costs, and, because of higher load factors, have more usage over which to spread those costs on a per-kWh basis, thus meriting a lower price;
- Despite these relatively lower costs that low-use customers impose on the system, low-use customers do not have the reduced costs reflected in their rates; and
- The proposed ESUB helps to remedy that unreasonable result and helps to improve cost reflectivity. Those customers imposing the lowest costs are not charged the highest rates, but are instead charged rates that better reflect their lower costs.³¹⁶

In its conclusion on cost reflectivity, BCOAPO makes reference to Colton's statement: "Providing a discount on the Essential Services usage block, in other words, improves rather than impedes cost reflectivity. In this sense, the Essential Services usage block is consistent with the Bonbright criterion of "fair apportionment of the costs amongst customers."³¹⁷

BC Hydro's submission on BCOAPO proposals

BC Hydro summarizes Mr. Colton's cost of service or "cost reflectively" basis for the recommended low-income rates as follows:

...the idea that low-consumption customers have a lower cost-of-service than high-consumption customers; that low-income customers are predominantly low-consumption customers; that in consequence low-income customers have a lower cost-of-service; and that the lower cost-of-service associated with low-income justifies the recommended low-income rates.³¹⁸

BC Hydro takes issue with this view for the following reasons:

1. The large majority of low-consumption customers are not low-income and preferential rates for only the low-income and not all low-consumption are "plainly discriminatory and unfair" to the customers upon whose consumption BCOAPO bases its justification for the ESUB rate;
2. There are a significant number of low-income customers who are not low-consumption customers;
3. Contrary to BCOAPO's position, the evidence does not support the assertion that low-income or low-consumption customers have a lower cost of service than other residential customers:
 - i. BC Hydro submits its evidence demonstrates that the annual load profiles of all its low-income and non-low-income residential customer segments are substantially the same shape regardless of dwelling type, heating type or consumption level;
 - ii. BC Hydro confirmed that the load factors of its residential customers are very close regardless of consumption and other customer characteristics;

³¹⁶ Ibid., pp. 55-58.

³¹⁷ Ibid., p. 58.

³¹⁸ BC Hydro Final Argument dated October 11, 2016, p. 8.

- iii. BC Hydro states the RIB energy charge has to collect not only BC Hydro's variable cost of energy but also the majority of its fixed or demand and customer-related costs and as a result it is to be expected that the lower a customer's consumption, the less likely it is to be paying its fully allocated cost-of-service. BC Hydro notes it was able to quantify this relationship, and testified that small consumption customers currently pay about 71 or 72 percent of their demand and customer-related costs, and that with the ESUB they would pay only about 43 to 46 percent of their demand and customer-related costs;
- iv. BC Hydro submits that while it provided calculations of "so-called" 4CP and NCP load factors, it does not calculate load factor on either a 4CP or NCP basis. In BC Hydro's view "these are at best unorthodox methods of calculating load factors." Given Mr. Colton's testimony that he is not qualified to provide cost-of-service opinion evidence, BC Hydro argues there is no evidence on the record of this proceeding from anyone qualified to opine on Mr. Colton's use of 4CP and NCP load factors and their relationship to cost-causality. BC Hydro also notes the conclusions drawn on pages 56 and 57 of the BCOAPO Argument on this topic are not supported by the testimony of any witness.³¹⁹

Other intervener arguments

BCSEA, NIARG, and MoveUP support the ESUB rate. BCSEA and MoveUP support it on the basis that the Commission has jurisdiction to approve a qualified low-income rate such as the ESUB rate.³²⁰

BCSEA also submits if the Commission finds that it has jurisdiction it should direct BC Hydro to develop and file a residential low-income rate proposal, in consultation with BCOAPO, low-income customers, stakeholders and government agencies such as the Ministry of Social Development and Social Innovation.³²¹

NIARG finds BCOAPO's cost-reflectivity regulatory justification persuasive in that the ESUB would avoid charging the highest rates to the customers imposing the lowest costs, and results in rates to low-use customers that better reflect their lower costs.³²²

AMPC accepts lifeline programs may serve an important policy perspective and takes no position on whether the Commission has the jurisdiction to order the ESUB rate as proposed by BCOAPO.

Zone II submits that any implementation of BCOAPO's proposal for an ESUB would need to be adjusted to reflect the difference in NIA rate structure and anticipates that this will be addressed in the Module 2 proceeding.³²³

CEC cites evidence that it submits does not support BCOAPO's cost reflectivity argument:

- BC Hydro's evidence that low-income customers have about the same cost of service as residential customers as a whole based on the shape of their load profiles;
- BC Hydro's testimony that BCOAPO's calculations were not based on the common calculations and that BC Hydro's calculations do not differ materially from the industry norm; and

³¹⁹ Ibid., pp. 8-12.

³²⁰ BCSEA Final Argument, p. 53; MoveUP Final Argument, p. 24.

³²¹ BCSEA Final Argument, p. 57.

³²² NIARG Final Argument, p. 10.

³²³ Zone II Final Argument, p. 18.

- BC Hydro also confirms in its rebuttal evidence that residential customers peak at about the same time, and their load profiles are substantially the same.³²⁴

CEC recommends the Commission accept BC Hydro's analysis since it is supported by evidence that low-income customers and all customers have essentially the same shape load profiles and therefore proportionately cause the same proportional cost. CEC submits "Mr. Colton conceded that he does not have expertise in cost of service issues so it is understandable that he has not identified the issues in the way BC Hydro has." Further, CEC states that even if low-use customers do create lower costs, cost causation principles would suggest it is reasonable for all customers causing lower costs to receive lower rates, not just lower income customers.³²⁵

BCOAPO reply

BCOAPO notes the widespread support of its proposals³²⁶ and submits most of the foundations for cost reflectivity were left unchallenged by BC Hydro and CEC.³²⁷

BCOAPO submits that the following unchallenged facts establish a basis for approving the ESUB:

- BC Hydro's 2013 RIB Evaluation Report and 2014 REUS both found that income has a statistically significant effect on consumption;
- BC Hydro's own empirical data presented in this proceeding clearly showed that a disproportionate share of low-use customers is low-income and, conversely, that a disproportionate share of low-income customers is also low-use; and
- \$1,013.8 million of BC Hydro's total \$1,060.50 million residential demand costs (96%) were allocated using either the 4CP or NCP factors. Moreover, BC Hydro notes the obvious: demand costs far outstrip energy costs in customer rates. Demand costs, in other words, are the most substantial part of rates, and those demand costs are allocated using the 4CP and NCP factors.

BCOAPO also includes the following as unchallenged facts in its reply:

- Higher use residential customers tend to have lower load factors. By implication, therefore, lower use customers tend to have higher load factors. Low-use, high load factor, customers impose lower costs on BC Hydro's system. BC Hydro acknowledges that "low load factors are indicative of customers that are relatively more costly to serve and load factor is therefore a consideration when evaluating rate class segmentation."
- BC Hydro's data shows that low-use customers have lower peaks using both the 4CP and NCP factors, combined with higher load factors. As a result, the lower demand costs are spread over more kWh of consumption, thus lowering the cost per kWh even further.

Commission determination

The Panel does not accept BCOAPO's cost reflectivity pillar as a regulatory justification for the proposed ESUB rate.

³²⁴ CEC Final Argument, pp. 62-63.

³²⁵ Ibid., p. 63.

³²⁶ BCOAPO Reply Argument, p. 3.

³²⁷ Ibid., p. 10.

Fundamental to BCOAPO's argument is that low-use customers cause fewer costs. In the Panel's view, BC Hydro has provided sufficient contradictory evidence indicating low-income customers have a similar cost of service to residential customers as a whole. BC Hydro's load profile analysis included in its rebuttal evidence indicates residential customers peak at about the same time and their load profiles are similar. Further, the Panel is persuaded by BC Hydro's evidence indicating BCOAPO's calculations using 4CP and NCP factors are not commonly used and BC Hydro's calculations do not differ materially from the industry practice. Accordingly, the Panel finds the methodology for calculating load factors relied on by BCOAPO is not appropriate.

It is BCOAPO's submission that most of the foundations for cost reflectivity were left unchallenged by BC Hydro and CEC. The Panel does not agree. BC Hydro has provided persuasive contradictory evidence refuting the assertion that low-consumption customers cost less to serve. For example, BC Hydro's evidence indicates the annual load profiles of all its low-income and non-low-income residential customer segments are substantially the same shape regardless of dwelling type, heating type or consumption level. With respect to BCOAPO's alternative request, given the strength of this contradictory evidence, the Panel does not consider it appropriate to order BC Hydro to undertake further analysis.

Even if the evidence did support BCOAPO's view that low-use customers cost less to serve, the Panel notes CEC and BC Hydro arguments that all low-use customers, not just low-income customers, should have access to the lower rate. Since the large majority of low-consumption customers are not low-income, the Panel agrees with BC Hydro that an ESUB rate made available to only the low-income and not all low-consumption customers would be unduly discriminatory. Further, the Panel also notes that a significant number of low-income customers are not low-consumption customers.

7.3.3.2 Improved efficiency

BCOAPO acknowledges BC Hydro's rebuttal evidence disputing that increased efficiency and improved revenue collection will result from the adoption of the ESUB rate. BCOAPO notes that BC Hydro states:

In general terms, tangible savings from improved payments could result from a reduction in dunning communications, call centre resourcing, bad debt expense, or borrowings on deferred revenues. BC Hydro has no evidence to suggest that any of these costs would be materially reduced by the introduction of the proposed ESUB rate.³²⁸

However, BCOAPO argues that BC Hydro's statement is contrary to other evidence, including:

- BC Hydro's witness acknowledged actively managing accounts receivables and aging is important to minimize bad debt expense;
- Mr. Colton's testimony indicating that third party evaluations (77 reports referred to in his testimony) have documented that reducing bills to low-income customers results in an improved revenue collection;
- BC Hydro's own evidence shows that customers who have arrears have higher bills;

³²⁸ BCOAPO Final Argument dated September 26, 2016, p. 59; BC Hydro Rebuttal Evidence, p. 6.

- BC Hydro's witness agreeing that decreasing cost such as working capital and bad debts will provide benefits to BC Hydro;³²⁹ and
- While BC Hydro asserts it is doing an adequate job on collections, Mr. Colton stated "we don't have to find that the utility is doing a bad job now in order to find, as I point out in my testimony, that the utility can do a better job and improve the complete, regular, timely and unsolicited payment of bills from low-income customers. . ."³³⁰

BCOAPO submits the ESUB rate will improve the completeness, timing and regularity of collections from low-income customers and reduce its credit and collection efforts.³³¹

BC Hydro's submission on BCOAPO proposals

With respect to whether BC Hydro would see offsetting cost reductions from the proposed ESUB rate, in its rebuttal evidence, BC Hydro states:

In general terms, tangible savings from improved payments could result from a reduction in dunning communications, call centre resourcing, bad debt expense, or borrowings on deferred revenues. BC Hydro has no evidence to suggest that any of these costs would be materially reduced by the introduction of the proposed ESUB rate. This view, in part, reflects that the thresholds for sending dunning communications and disconnecting service are \$30 and \$70 respectively. As such, by itself a \$16 reduction in monthly electricity bills for low-income customers would not have a material impact on the number of dunning communications or disconnections. Moreover, even if BC Hydro were to accept the proposition that on-time payments would be reduced for low-income customers under the ESUB rate, the rate increase of 1.5 to 3 percent would also impact arrears for customers that are not low-income, leading to increased bad debts and borrowings from delayed revenues for those customers.³³²

BC Hydro agrees that "cost-effective" low-income rates are appropriate provided:

- (a) Costs include all incremental expenditures and revenues that arise from the new low-income rates;
- (b) The desired outputs of the low-income rates consider the broader objective of maximizing recovery from all customers for their collective benefit; and
- (c) The assessment of incremental expenditures and revenues arising from the new low-income rates is not based on unfounded assumptions.³³³

BC Hydro submits that Mr. Colton's analysis is not consistent with this definition because it does not take into account significant incremental expenditures and revenue losses that would arise from the ESUB rate including the loss of revenue associated with the ESUB, the costs of implementing and administering changes in the billing system, and the lost revenue associated with the low-income exemptions from the minimum reconnection charge.

³²⁹ BCOAPO Final Argument dated September 26, 2016, pp. 59-60.

³³⁰ Ibid., p. 60; Transcript Volume 7, pp. 1240-1241.

³³¹ Ibid., p. 61.

³³² Exhibit B-31, p. 6.

³³³ BC Hydro Final Argument dated October 11, 2016, pp. 12-13.

BC Hydro notes it has had significant gains in recent years in its collections practices. BC Hydro states it currently collects 99.83 percent of its accounts, on a dollar basis, corresponding to bad debt of 0.17 percent, which is the lowest it has been for at least 10 years. BC Hydro states its bad debt rate represents a fraction of the bad debt rate in Ontario.³³⁴ BC Hydro submits further “efficiencies in collections efforts will be difficult to achieve in any event but to the extent they can be achieved it ought to be through technology and business process improvements, as has been the case the last several years.”³³⁵

BC Hydro does not agree with BCOAPO’s view that its witness acknowledged that actively managing accounts receivables and aging as important in minimizing bad debt expense is evidence to support the proposition that “reducing bills will, indeed, result in improved efficiencies and reduced costs.”

BC Hydro states the evidence suggests that there is in fact no simplistic relationship between the size of a customer’s bill and account receivables, bad debt or efficiency of collection practices and provides the following example:

For example, Attachment 1, IR 1.192.1 shows clearly that both bad debt (in dollars) and active residential accounts receivable greater than 60 days (also in dollars) were the same in Fiscal 2016 as they were in Fiscal 2011 despite annual average rate increases in each year and despite an increase in the number of customer accounts over that period.³³⁶

With reference to the “77 reports” cited by Mr. Colton, BC Hydro states:

- These reports are still not properly on the record of this proceeding;
- There is no evidence that the reports are applicable to the circumstances of BC Hydro; and
- There is no evidence that they support Mr. Colton's hypothesis that low-income rates will be cost-effective or will result in a net reduction in BC Hydro costs.³³⁷

BC Hydro submits, as outlined in its Rebuttal Evidence, that there are “no quantifiable net benefits to any of Mr. Colton’s low-income rate proposals.”³³⁸

BC Hydro notes its total collection costs are about \$16 million, about 10 percent of BC Hydro customers are low-income, and low-income customers do not generally seem more or less able or inclined to pay their bills than non-low-income customers. BC Hydro argues assuming all low-income collection costs represented 10 percent of total collection costs of about \$1.6 million, if all of these costs were eliminated with adoption of the ESUB rate, BC Hydro would cover just a fraction of incremental impact on revenues and expenditures related to the ESUB rate.³³⁹

³³⁴ Ibid., p. 16; Exhibit B-26-1, Attachment 1, IR 1.192.1, Figure 1; Exhibit B-26-1, p. 41; Transcript Volume 7, p. 1208, ,corrected in Exhibit B-58-1.

³³⁵ Ibid., p. 16.

³³⁶ Ibid., p. 17; Exhibit B-26-1, IR 1.192.1, Attachment 1.

³³⁷ Ibid., pp. 18-19.

³³⁸ Ibid., p. 19.

³³⁹ Ibid.

Other intervenor arguments

With the exception of CEC, none of the interveners commented on the BCOAPO improved efficiency regulatory justification for the ESUB rate.

CEC submits it does not agree with BCOAPO's argument that cost savings will accrue to be adequately supported. CEC states Mr. Colton's evidence is limited with respect to cost efficiency and is effectively countered by the BC Hydro rebuttal evidence.³⁴⁰

BCOAPO reply

In response to BC Hydro's assertion that it is already doing a good job of collections, BCOAPO notes a number of items concerning the efficiency and effectiveness of BC Hydro's collection processes. BCOAPO refers to its response to BCUC IR 12.2, outlining there is a population of unpaid accounts that are not effectively being reached by existing processes resulting in a relatively constant nonpayment population which is owing BC Hydro more and more money. BC Hydro's increased efforts generate less and less impact and the ratio of deferred payment arrangements (DPA) to accounts more than 60-days in arrears has remained virtually constant.³⁴¹

BCOAPO submits the ESUB rate will improve the timely payment of bills and result in fewer arrears. To support this, it points to data presented in response to BCUC IR 12.2 indicating:

...a low income program such as ESUB resulted in 20% of program participants having arrears in no months, while only 1% to 4% of program non-participants had arrears in no months. On the other end of the spectrum, the data BCOAPO provided revealed that only 11% of program participants had arrears in 19 or more of the 24 months of the program, while nearly 60% of the low-income program nonparticipant did.³⁴²

BCOAPO submits the ESUB rate will also allow BC Hydro to collect its bills with less effort than the current collection process. Referring to the same IR response, BCOAPO states the evidence shows that the longer a customer participated in the bill affordability program, the less the utility had to work.

BCOAPO further submits the ESUB rate will help improve BC Hydro's ability to collect its entire bill from program participants based on data provided in the same IR response. BCOAPO states this data showed:

...between 82.5% and 92% of customers with more affordable bills paid 100% or more of their bills each month, only 57.4% to 65.6% with less affordable bills did. While 97.3% (92.0% + 5.3%) of low-income customers with more affordable bills paid 90% or more of their bills each month, only 73.5% (16.1% + 57.4%) of customers did.³⁴³

BCOAPO submits CEC's argument that this information was effectively countered by BC Hydro should be rejected since BC Hydro did not challenge or rebut this data.³⁴⁴

³⁴⁰ CEC Final Argument, p. 64.

³⁴¹ BCOAPO Reply Argument, pp. 13-14.

³⁴² Ibid., pp. 14-15.

³⁴³ Ibid.

³⁴⁴ Ibid., p. 15.

With respect to the BC Hydro argument that neither BCOAPO nor Mr. Colton provided any reason to believe that any of the 77 evaluations had any applicability to this proceeding, BCOAPO references Mr. Colton's testimony where he states:

I provided a list of third party evaluations where someone -- when a utility implemented a low income program, someone other than the utility evaluated that program on an after-the-fact basis. And I've both done those evaluations and have been consulted on evaluations done by others, and I've read every -- not merely read but studied every one of those evaluations.³⁴⁵

In reply to BC Hydro's opposition to the ESUB rate on the basis that any reduction in collection costs would be insufficient to cover the lost revenue resulting from the program, BCOAPO submits it is inappropriate to review ESUB on this basis.³⁴⁶

BCAOPO submits arguments relating to the cost of the ESUB rate do not merit rejection of the ESUB proposal. BCOAPO submits:

- The proposed ESUB is reasonably priced and does not put an unreasonable burden on the residential customers who will pay for it;
- The actual take-up rate will be closer to 50 percent as explained by Mr. Colton;
- BC Hydro provides no evidence to support suggestion that the take-up rate for ESUB would be closer to 100 percent based on California's participation rate in its low-income discount. BCOAPO states one reason that California enrollment rates are high is because the state allows for self-certification for program participation. The ESUB proposal requires an application and independent third-party verification of income eligibility as well as an annual verification of eligibility; and
- BCOAPO submits the ESUB rate does not pose a particular administrative cost burden and the start-up costs for ESUB are not unreasonable.

Commission determination

The Panel does not accept BCOAPO's improved efficiency pillar as providing sufficient regulatory justification for the proposed ESUB rate.

To assess the extent to which the ESUB rate would improve BC Hydro's efficiency and provide a regulatory justification for the ESUB rate, the Panel considers it necessary to compare the expected costs of the ESUB program to the potential cost savings that can be reasonably expected to occur as a result of implementing the program.

The Panel notes there is some disagreement among the parties about the estimated costs of the ESUB rate resulting from differing assumptions with respect to low-income customer take-up rate. Even if the take-up rate

³⁴⁵ Ibid., p. 16; Transcript Volume 7, p. 1285, lines 19-26.

³⁴⁶ Ibid., p. 16.

is in the 50 percent range, consistent with Mr. Colton's experience in other jurisdictions, the costs would be approximately \$15 million.

While we recognize it is difficult to precisely measure the benefits of any efficiency improvements, the Panel considers it most appropriate to measure the outcomes in monetary terms. Although BC Hydro has not provided a precise monetary measure of potential savings, it points out in its Rebuttal Evidence that a bill reduction of \$16 is not likely to reduce the number of payment issues and have a material impact on BC Hydro's collection costs. The Panel also notes BC Hydro's recent improvements in its collections practices and its current bad debt expense of 0.17 percent and we agree with BC Hydro that further improvements in its processes will be difficult to achieve. In the Panel's view, the evidence that the ESUB rate is unlikely to have a material impact on costs is further supported by BC Hydro's argument that even if the savings were 10 percent of its total collection costs of approximately \$16 million, this would cover a very small portion of the incremental impact on revenues and expenditures related to the proposed ESUB rate. This is true even if the costs of the ESUB rate are \$15 million or at the lower end of the range.

BCOAPO submits the response to BCUC IR 12.2, and third party evaluations cited by Mr. Colton in his testimony, supports its view the ESUB rate will improve the completeness, timing, and regularity of BC Hydro's collections from low-income customers and reduce credit and collection efforts. In the Panel's view, this information has not been directly linked to BC Hydro's circumstances, does not help quantify the benefits that may accrue to BC Hydro from the proposed ESUB rate and does not provide information to support a conclusion that the benefits will be material to BC Hydro. The Panel agrees with CEC that BC Hydro's evidence is more credible since it is based on BC Hydro's own cost structures. Moreover, Mr. Colton acknowledges that he is not a cost of service study expert.³⁴⁷ Given these circumstances, the Panel finds there is not sufficient evidence to support BCOAPO's assertion that there is a material reduction in collection costs by the introduction of the proposed ESUB rate.

Given BC Hydro's evidence as to the immateriality of the cost savings compared to the cost of the proposed ESUB rate, the Panel does not consider BCOAPO's alternative request for additional analysis appropriate.

7.3.3.3 Improved affordability

BCOAPO submits the adoption of the ESUB rate will improve the affordability of BC Hydro rates. BCOAPO submits:

In the absence of an ESUB, BC Hydro is increasing rates to households for whom service is already unaffordable (as documented by Mr. Klein); who lack the ability to mitigate those rate increases through usage reduction; and who are facing the higher rates even though they impose lower costs on the Company. The proposal for an ESUB, however, is not based exclusively on affordability concerns. It is a mechanism through which BC Hydro can simultaneously address these affordability concerns, improve cost reflectivity in rates, and improve the efficiency of BC Hydro's operations and reduce overall operating costs.³⁴⁸

³⁴⁷ Transcript Volume 7, p. 1246.

³⁴⁸ Ibid., p. 62.

BC Hydro's submission on BCOAPO proposals

BC Hydro notes that while Mr. Colton justifies his proposals using a “three-legged stool”, the stated purpose of all the low-income rate recommendations is to address rate affordability issues and assist low-income ratepayers.³⁴⁹

BC Hydro observes Mr. Colton did not offer and was not qualified to offer “any opinion evidence on how his recommendations would affect the incidence or scope of poverty in British Columbia, the circumstances of individual low-income customers of BC Hydro, or more generally “affordability.”³⁵⁰ BC Hydro also states that Mr. Klein did not comment on Mr. Colton's testimony or how his proposals might mitigate the scope and extent of poverty in BC. Similarly, BC Hydro argues that none of the community activists and individual customers of BC Hydro offered any evidence suggesting they were aware of Mr. Colton's recommendations or that they would be meaningful or helpful.

BC Hydro submits:

In short, the BCOAPO have offered evidence of a problem (the nature and extent of poverty in British Columbia as described by Mr. Klein and the BCOAPO's lay witnesses) and opinion evidence of a solution (Mr. Colton's recommendations), but no evidence that the solution will address the problem. Without such evidence the Commission has no basis to accept on a balance of probabilities, or otherwise, that the affordability element of Mr. Colton's recommendations can be satisfied. It follows that the affordability leg of Mr. Colton's three-legged stool cannot stand.³⁵¹

Other intervenor arguments

CEC states it is sympathetic to the issues low-income ratepayers face but does not accept “the electric energy bill is the appropriate place for remediation to occur.” CEC states that BCOAPO's proposal fails to address the root cause of the issue and submits this proposal may not make a significant enough impact on a low-income person's ability to have a reasonable and safe standard of living.³⁵²

With respect to affordability, CEC submits that apart from payment terms on which BC Hydro has made significant adjustments, the Commission has no jurisdiction to discriminate based on income for rate setting. Further, CEC does not find ‘affordability’ to be a regulatory consideration in the Bonbright principles beyond acceptance and bill payment collection terms and conditions.³⁵³

³⁴⁹ BC Hydro Final Argument dated October 11, 2016, p. 6.

³⁵⁰ Ibid., p. 7.

³⁵¹ Ibid.

³⁵² CEC Final Argument, p. 64.

³⁵³ Ibid.

BCOAPO reply

In response to CEC, BCOAPO submits it has produced substantial evidence that the ESUB rate will improve the affordability of BC Hydro rates. BCOAPO states the ESUB rate provides meaningful assistance and the annual bill reduction would be \$108 and \$192 per year.³⁵⁴

With respect to CEC's submission that the appropriate responsibility for rate affordability resides with the provincial government and not BC Hydro, BCOAPO submits this does not consider the improvements in BC Hydro's collection responses. BCOAPO argues its proposal is designed to take that utility operating impact into account and with "CEC's approach, any distribution of benefits by the government would accomplish no objective in which BC Hydro (or the Commission) would take an interest."³⁵⁵

Commission determination

The Panel agrees with CEC that affordability is not a regulatory justification for the proposed ESUB rate. As noted in the previous section, in the absence of an economic or cost of service justification, the Panel has no jurisdiction to approve a low-income rate. Therefore, BCOAPO's affordability pillar cannot stand without a sufficient cost savings as justification. As noted above, the Panel does not accept BCOAPO's improved efficiency or cost reflectivity pillars as regulatory justification for the proposed ESUB rate. Given that the Panel finds it does not have jurisdiction to set low-income rates in the absence of an economic or cost of service justification, **BCOAPO's request to establish an essential services usage block rate for qualified low-income ratepayers is denied.**

7.4 Crisis intervention fund

BCOAPO seeks an order for BC Hydro to implement its proposal for a CIF to be funded via a \$0.25 per month charge per BC Hydro account. BCOAPO proposes that all customer classes pay the \$0.25 per month charge for the CIF and the resulting \$5.4 million fund would cover all program costs including administration.

In the alternative, should the Commission determine that it requires further information prior to implementing a CIF for low-income residential customers, BCOAPO asks that the Commission direct BC Hydro to prepare and file, within six months of the date of the Commission's order, a proposed crisis assistance program for low-income customers who have arrears with BC Hydro and are unable to pay their electricity bills.³⁵⁶

BCOAPO describes its proposal as follows:

A crisis intervention program would involve providing funds when a low income customer faces a situation that threatens the continuing ability of that customer to take electric service. Such a crisis situation may, but need not necessarily, involve providing a grant to prevent the disconnection of service for nonpayment. In the alternative, a crisis intervention grant might respond to a level of arrears that the program administrator deems is of sufficient size that the customer will never be capable of retiring them in full. Moreover, a

³⁵⁴ BCOAPO Reply Argument, p. 22.

³⁵⁵ Ibid., pp. 22-23.

³⁵⁶ Ibid., pp. 4-5.

crisis situation might involve circumstances where a customer is already “off-system” and lacks sufficient funds to make an arrearage payment, along with paying a reconnection charge and possibly a cash security deposit. A crisis intervention grant is intended to respond to unexpected and temporary circumstances that place a customer’s service in jeopardy.³⁵⁷

BCOAPO submits the CIF should be administered through an independent third party responsible for the day to day administration of the fund.³⁵⁸

BCOAPO proposes that all customer classes pay the \$0.25 per month charge for the CIF on the basis that it benefits more than the residential class. BCOAPO cites Mr. Colton’s testimony that a chief contributor to a lack of employee productivity arises when employees are experiencing a financial crisis at home. Thus, addressing this crisis at home benefits the employer as well as the employee.³⁵⁹

BCOAPO submits there is a regulatory justification for the CIF. BCOAPO submits it contributes to the cost-effective response to customer non-payment in that it provides a way to respond more effectively and more efficiently by the utility to non-payment, and to improve the complete timely, regular, unsolicited payment of bills. BCOAPO argues it is the focus on generating a utility benefit that distinguishes the CIF from a government-funded social assistance program.³⁶⁰

BCOAPO submits the Ontario data tables they provided in Exhibit C2-48 support BCOAPO’s proposals regarding deferred payment plans, a crisis intervention fund, and the renewable delays on disconnections for vulnerable customers.³⁶¹

BC Hydro’s submission on BCOAPO proposals

BC Hydro argues that “[a]ssuming one accepts the CIF as a rate proposal, it is plainly discriminatory as it is only available to and at best benefits a small segment of low-income residential customers, but would be paid for by all customer classes.” BC Hydro argues Mr. Colton justified the fund on the assertion that all customers would see a cost-effectiveness benefit; however, the cost-effectiveness test does not consider all incremental costs and revenues arising from the proposal. BC Hydro further states the benefits to all customers from the fund are “unsupported assertions that should be given no weight in light of the advocacy role that Mr. Colton took in this proceeding.”³⁶²

In response to BCOAPO’s request for alternative relief should the Commission require further information from BC Hydro, BC Hydro submits the proper course of action is to make such enquires of BC Hydro that allow it to provide the necessary information. BC Hydro also submits it would not be appropriate for the Commission to

³⁵⁷ Ibid., p. 67.

³⁵⁸ Ibid., pp. 67-68.

³⁵⁹ BCOAPO Final Argument dated September 26, 2016, pp. 68-69.

³⁶⁰ Ibid., pp. 69-70.

³⁶¹ Ibid., p. 71.

³⁶² BC Hydro Final Argument dated October 11, 2016, p. 29.

decline to approve the requested CIF on the basis of insufficient information and then direct BC Hydro to make a substantively similar proposal.³⁶³

Other intervener arguments

AMPC submits BCOAPO's proposal to fund the CIF with a \$0.25/month charge per BC Hydro account for all accounts, although a *de minimis* amount, results in inter-class cross-subsidization inconsistent with cost causation principles.³⁶⁴ AMPC further argues:

...ratemaking is not about charging customers based on the benefit they receive from various programs, but instead based on the costs they cause a utility to incur to provide them with service. Communities also benefit from increased employment and reduced costs of necessary goods, but similarly that does not in and of itself justify shifting the cost to serve industrial or commercial customers to residential customers. Indeed, it would be rare that a program to reduce rates for a certain customer class would not have a broader community impact.³⁶⁵

Regarding the CIF, CEC submits:

- It is impossible to determine the reasonableness of the funding without a greater understanding of the proposal and how it would operate. If the Commission wants to approve the crisis intervention fund it should require further development of the plan including a full cost/benefit analysis;
- BC Hydro's bad debt and restructured payment terms policies amount to a crisis response and that these are backed up by the full financial capability of BC Hydro;
- Establishing a fund for crisis management is unnecessary and duplicative of government programs available for similar purposes;
- The evidence regarding improvements to the utility is not persuasive; and
- There is not sufficient merit in this proposal to warrant BC Hydro deviating from its approach to work on the terms and conditions affecting all customers in their bill payment and affordability.³⁶⁶

In the event the Commission does approve a CIF, CEC submits it should be funded only by the residential sector since residential customers would be the only participants and the primary beneficiaries. CEC submits that benefits to the commercial sector are "spillover and are not justification for imposing an additional burden on the commercial sector."³⁶⁷

BCOAPO reply

BCOAPO responds to AMPC's view that the CIF charge be limited to residential customers by stating that while it believes all classes of customers will benefit, BCOAPO is not opposed to restricting the funding to residential customers.³⁶⁸

³⁶³ Ibid., p. 30.

³⁶⁴ AMPC Final Argument, pp. 17-18.

³⁶⁵ Ibid., p. 19.

³⁶⁶ CEC Final Argument, pp. 65-66.

³⁶⁷ Ibid., p. 67.

³⁶⁸ BCOAPO Reply Argument, pp. 22-23.

BCOAPO notes the propositions the parties left unchallenged, including:

- Crisis intervention is not an annual income supplement for low-income customers or a source of financial assistance. A grant is to respond to unexpected and temporary circumstances that place a customer's service in jeopardy;
- The crisis intervention program is a way to respond more effectively and more efficiently by the utility to non-payment, and to improve the complete timely, regular, unsolicited payment of bills;
- The reduction of working capital resulting from retirement or reduction of arrears is a benefit to the utility; and
- It is this focus on generating a utility benefit that distinguishes the CIF from a government funded social assistance program.

BCOAPO submits the only incremental costs that BC Hydro is actually able to identify with respect to the CIF are the costs involved with administration and the proposal provides for administrative costs to be taken out of the fund, including start-up and administrative costs.

Commission determination

To assess whether to approve the CIF, the Panel considers several issues set out below.

Does approval of a CIF result in the Commission setting social policy?

The Panel notes BC Hydro's arguments that setting social welfare policy is the role of the Province and CEC's submission that establishing a fund for crisis management is unnecessary and duplicative of government programs available for similar purposes. However, the Panel is persuaded by BCOAPO's argument that the CIF would not amount to a social assistance program if it generates a utility benefit sufficiently justifiable on an economic or cost of service basis. The issue of whether there is an economic or cost of service justification is addressed below.

Should all rate-classes fund the CIF?

The Panel agrees with BC Hydro, AMPC and CEC's submissions that extending the funding to all rate classes is discriminatory in that it results in inter-class cross-subsidization since only residential customers would be eligible to participate in and receive benefits from the fund. The Panel considers that, provided there are other justifications for approving a CIF, the funding should be limited to residential customers. The Panel notes BCOAPO is not opposed to restricting the funding to residential customers.

Is there an economic or cost of service justification for the CIF?

With respect to the ESUB rate, BC Hydro indicated that in general terms, tangible savings from improved payments could result from a reduction in collection costs, bad debt expense, or working capital requirements but stated it has no evidence to suggest that any of these costs would be materially reduced. BC Hydro also submits the benefits to all customers from the CIF are "unsupported assertions." Similarly, CEC submits the evidence regarding improvements to the utility is not persuasive.

The Panel notes that BC Hydro did acknowledge some, albeit immaterial, level of improved efficiency would result from ESUB. The Panel considers that while the amount of benefits the CIF may provide have not been quantified, to the extent that the receipt of CIF funds results in a reduction in bad debts, it could have an impact that potentially would offset what is an immaterial cost to ratepayers. In the Panel's view, if BC Hydro receives an amount from the CIF as a direct payment of a delinquent account, it is more likely to result in tangible benefits and greater efficiency improvements compared to trying to assess the benefits of a \$16 ESUB rate reduction.

Further, if the cost of the CIF is significantly less material than the ESUB rate proposal, then the benefits may be more likely to offset the costs to a greater degree. In the Panel's view, if the overall cost of the CIF is small and there can be some reasonably expected tangible benefits, it is worth establishing a CIF pilot to assess the actual impacts, provided the CIF results in no undue discrimination among residential customers.

Is there undue discrimination regarding a ratepayers' ability to access the CIF?

In the Panel's view, the requirement for all residential customers, including low-income customers, to pay an immaterial \$0.25 per month charge to fund the CIF is not discriminatory since all customers in the class are paying the same rate and could potentially rely on the fund in a time of need. However, if the cost savings resulting from the CIF do not do not fully offset the costs and a ratepayer's ability to access the CIF is limited to a small segment of residential customers who find themselves in a financial crisis facing disconnection, the Panel must decide if this results in undue discrimination.

While not specifically addressed by the parties, the Panel considers it reasonable to consider the monthly payment into the CIF by all residential ratepayers as being akin to an insurance premium to provide coverage in the event a ratepayer finds itself in a financial crisis and is unable to pay its account and avoid disconnection. If all ratepayers pay into the CIF and are entitled to access it in the same way if they find themselves in a financial crisis, then this may not be discriminatory. Further, even if some ratepayers are more likely than others to find themselves in a crisis position with the need to need to access the funds and this is viewed as somewhat discriminatory, given the small cost and the likelihood there will be some offsetting benefits, the result would not be unduly discriminatory.

Is further development of the plan required prior to approval?

In the Panel's view, there is insufficient information on the record in this proceeding to make a determination on the establishment of a crisis intervention fund on a permanent basis; however, the Panel is persuaded of the merits of establishing a pilot crisis intervention fund. **Accordingly the Panel directs BC Hydro to prepare and file, within six months of the date of the issuance of this decision, a proposed crisis intervention fund pilot program for residential customers who have arrears with BC Hydro and are unable to pay their electricity bills. BC Hydro must include the following information/analysis when filing the proposed crisis intervention fund pilot program plan with the Commission:**

1. **The proposed start and end date of the pilot program, including a discussion of the feasibility of operating the CIF pilot until the next RDA hearing so that the Commission and the parties can obtain a greater understanding of the impact of a CIF;**
2. **Development of cost/benefit measurement criteria to be able to access the impact of the proposed CIF pilot or program; and**
3. **Details regarding the implementation and operation of the CIF pilot program,, including the amount of the monthly charge, who and how the CIF will be administered, and the eligibility criteria for ratepayers to access the CIF.**

BC Hydro has indicated that it is prepared to work collaboratively with the low-income advisory group in the development of its proposal, and the Commission expects that it will do so.

7.5 Other low-income proposals

Low-income Electric Tariff changes

BCOAPO proposes amendments to the Electric Tariff to allow for the following customer rules for qualified low-income ratepayers:

1. Exempt low-income customers from the minimum reconnection charge;
2. Exempt low-income customers from the account charge;
3. Waive security deposits for low-income customers; and
4. Exempt low-income customers from late payment charges on a going forward basis.³⁶⁹

BCOAPO supports these changes due to the “reality facing low income customers” and submits BC Hydro’s own business practices contribute to, rather than alleviate, the underlying payment problems of low-income customers. BCOAPO submits these charges lead to “a never-ending loop of nonpayment and assessment of additional charges, leading to yet more nonpayment” and BC Hydro would break the loop by implementing these changes for low-income customers.³⁷⁰ BCOAPO also submits LPCs are not an incentive for low-income customers and credit and collection charges that further increase a customer’s bill are counterproductive.³⁷¹

Deferred payment arrangements (DPAs)

BCOAPO states that nearly 90 percent of BC Hydro’s average monthly installments in DPAs are not affordable.³⁷² BCOAPO notes it is problematic for low-income customers to have an arrearage payment added to the bill for current service and cites BC Hydro’s acknowledgement in its statement “if a customer does not have the ability to pay, conceptually, it makes sense that credit and collection responses that further increase a customer’s bill may not be productive.”³⁷³

BCOAPO notes that BC Hydro is working on business process changes to DPAs to allow repayment over longer periods provided that bills are paid before the next winter heating season. In BCOAPO’s view, the changes

³⁶⁹ BCOAPO Final Argument dated September 26, 2016, p. 5.

³⁷⁰ Ibid., p. 92.

³⁷¹ Ibid., p. 82.

³⁷² Ibid., p. 75.

³⁷³ Ibid., p. 74; Exhibit B-26-1, BCOAPO IR 1.192.1, REVISED Attachment 1 (second revision, July 2016), at p. 32.

should go further and recommends improving the affordability of payment plans, and thus the effectiveness of payment plans, through three steps:

- Setting the down payment at no more than 10 percent of arrears;
- Limiting the term to not less than 12 months;
- In the alternative to the second recommendation, placing a limit on required arrearage payments so that arrearage payments would not exceed an average monthly bill.

BCOAPO notes its response to BC Hydro 1.19.2 in which it stated “The data shows that not only does the utility collect more money, and collect that money in a more timely fashion when the payment plan takes affordability into account, but it works less hard to make the collection.”³⁷⁴

BC Hydro’s submission on BCOAPO proposals

BC Hydro is opposed to the recommendation that DPAs for low-income customers should not be less than 12 months because of the “well-documented fact that electricity bills are higher in the winter, DPAs that extend past the winter months will only serve to exacerbate the challenges that customers have paying their bills, and make it less likely they will ever be collected.”³⁷⁵

With respect to BCOAPO’s proposal to exempt low-income customers from LPCs, BC Hydro asserts that its evidence clearly demonstrates there is an economic or cost of service basis for the LPC, so to waive this charge for low-income customers would be discriminatory.³⁷⁶

BC Hydro submits its evidence clearly demonstrates that both the reconnection and account charges have a cost basis, are well established and are justified on that basis. BC Hydro notes during the customer engagement process BCOAPO supported the reconnection charge being set at \$30 and confirmed its support in its opening statement at the start of the oral hearing.³⁷⁷

Further, BC Hydro submits: “...BC Hydro has shown that in regard to both the reconnection charge and the account charge, ‘96.6 percent of customers disconnected for non-payment are reconnected within 60 days.’ Moreover, the reconnection charge is not imposed until after a customer has paid his or her arrears and been reconnected...”³⁷⁸

With respect to the proposal for security deposit exemption, BC Hydro states it is proposing changes to its terms and conditions that will give it greater flexibility in the assessment of security deposits. BC Hydro submits, BCOAPO and Mr. Colton have not provided any evidence that waiving security deposits for low-income customers will improve the cost-effective collection of the bills that BC Hydro renders to its low-income customers. Moreover, “to waive the security deposit for low-income customers would be plainly discriminatory

³⁷⁴ Ibid., p. 79.

³⁷⁵ BC Hydro Final Argument dated October 11, 2016, p. 31.

³⁷⁶ Ibid., p. 32.

³⁷⁷ Ibid., p. 32.

³⁷⁸ Ibid., p. 33.

because while it may benefit BC Hydro's low-income customers it would ultimately be paid for by all customers."³⁷⁹

Other intervenor arguments

CEC supports BC Hydro's position regarding the other low-income proposals in this section for the reasons put forth by BC Hydro, with the following exception:

The CEC agrees that BC Hydro should have discretion to provide an Installment Plan that accommodates a customers' ability to pay while balancing the reasonable costs to the utility. The CEC submits that BC Hydro's current prohibition on customers having installment terms that extend into the next winter season are somewhat restrictive and do not consider individual circumstances. The CEC submits it would not be unreasonable for BC Hydro to consider relaxing this regulation, enabling decision for repayment to be determined on a case by case basis.³⁸⁰

BCOAPO reply

With respect to DPAs, BCOAPO submits:

- The argument that DPAs should always be paid before the winter is arbitrary;
- BC Hydro's data does not support the argument that DPAs that extend into cold weather months are more likely to default;
- BCOAPO has demonstrated that improving the affordability of DPAs by extending their length will improve the success rate of those payments plans;
- Imposing a monthly installment limit of one average monthly bill would extend DPAs the result would be more affordable monthly payment and such extensions would not be burdensome to BC Hydro; and
- The likelihood that the DPA would be completed at all substantially increases.³⁸¹

In its reply argument, BCOAPO re-iterates its position on exempting low-income customers from these and from the requirement to pay security deposits. BCOAPO states it is,

...supportive of the reduction of the reconnection charge to \$30, and does not challenge either the reconnection charge or the account charge for residential customers as a whole. Rather, given (1) the lack of cost causation, (2) the extent to which the reconnection charge and account charge are barriers to service for low income customers, and (3) the harm to BC Hydro by applying additional charges to people who already cannot afford to pay their bills, BCOAPO has proposed that low income customers be exempted from these charges.³⁸²

³⁷⁹ Ibid., pp. 33-34.

³⁸⁰ CEC Final Argument, p. 71.

³⁸¹ BCOAPO Reply Argument, pp. 32-35.

³⁸² Ibid., p. 37.

Commission determination

BCOAPO's proposals to amend the Electric Tariff to exempt low-income customers from the minimum reconnection charge, the account charge, and the late payment charge, and to waive security deposits for low-income customers are denied.

The Panel finds BC Hydro has sufficiently demonstrated the cost of service basis for the minimum reconnection charge, the account charge and the late payment charge. As set out in section 7.1, the Panel finds it does not have jurisdiction to set low-income rates in the absence of an economic or cost of service justification. Accordingly, the Panel agrees with BC Hydro that waiving the charges for low-income customers would be unduly discriminatory. Further, providing low-income customers a security deposit exemption is also discriminatory because it puts other ratepayers at risk for non-payment.

The Panel notes BC Hydro has discretion to provide a DPA that balances the risk of non-payment and accommodates a customer's ability to pay. While the Panel accepts BC Hydro's view that extending the DPA into the next winter may have a compounding effect on arrears, we agree with CEC that a prohibition on customers may be overly restrictive in some circumstances. In the Panel's view, there may be individual circumstances, on a case by case basis, where it may be appropriate for BC Hydro to relax this position.

7.6 Proposed changes for all customers

BCOAPO asks BC Hydro to implement the following customer service practices and Electric Tariff changes for all residential customers:³⁸³

1. Time-based winter shutoff restrictions for all customers between November and April;
2. Renewable 60-day delay on disconnections for the families with young children, seniors, and people with medical emergencies;
3. Ban on the use of external credit scores as basis for security deposits for all customers;
4. Acceptance of alternatives to cash security deposits by offering customers the opportunity including the provision of sureties in lieu of a deposit or entering into an equal payment plan in lieu of providing a security deposit;³⁸⁴ and
5. Amending the LPC equal to BC Hydro's WACD rounded to 0.5 percent for all customers, and start LPCs at Day 60 beyond due date for all customers.³⁸⁵

BCOAPO notes the winter shut-off restrictions are uncontested due to BC Hydro's proposed pilot project and that no Commission order is required.³⁸⁶

BCOAPO recommends that BC Hydro's proposal relating to medical emergencies be approved with the modification that the 20-day extension being proposed be expanded not only to households with medical emergencies, but also to other vulnerable households including those with very young children and those with

³⁸³ Ibid., pp. 5-6.

³⁸⁴ Electric Tariff amendment required.

³⁸⁵ Electric Tariff amendment required.

³⁸⁶ BCOAPO Final dated September 26, 2016, pp. 105-106.

elderly members. Moreover, while the 20 business days should be available automatically, BC Hydro should extend that 20 days upon a showing of due cause. The testimony above demonstrates that the administrative processes cannot always be completed within 20 days. In addition, the testimony shows that, frequently, advocates need to package multiple sources of assistance, requiring multiple application processes, many of which must be pursued seriatim rather than simultaneously. BC Hydro's proposal should provide for an initial 20-day extension subject to extension where appropriate.

With respect to its proposal to ban the use of external credit scores as basis for security deposits for all customers, BCOAPO submits the use of third-party supplied credit information as a basis for making utility deposit decisions constitutes a problem when the third party information is not itself comprised of utility payment histories. BCOAPO notes several reasons support this conclusion:

- First, substantial research has found that consumers tend to pay their utility bills before paying any other outstanding credit (other than rent or mortgage obligations).
- Second, it has been found that low-income consumers frequently acquire poor credit ratings by refusing to complete payments on abusive credit card terms.
- Finally, persons who have never borrowed from a reputable institutional lender, or maintained a charge account at a large store, may have difficulty establishing that their credit is good.³⁸⁷

BCOAPO proposal for allowing sureties differs from BC Hydro as follows:

- The requirement that a surety also be a BC Hydro customer imposes unreasonable limitations on the practice. Even if such a requirement may be reasonable for individual households who seek to provide a surety in lieu of a cash security deposit, this practice may impose limitations on agencies and/or organizations who seek to provide sureties. Government agencies and private organizations are more likely to be multi-jurisdictional in nature, and yet still be perfectly acceptable sureties.
- Perhaps most significantly, BCOAPO disagrees with, and opposes, any proposal to require a surety to guarantee the complete bill of an account holder. A surety is intended to stand in lieu of a cash security deposit. Accordingly, the surety should extend only to the limits of what the cash security deposit, which the surety is replacing, otherwise would have been.

BCOAPO submits while it has the above noted differences with BC Hydro's response to BCOAPO's proposal to allow the use of sureties and guarantors in lieu of cash security deposits, BC Hydro's response is reasonable and should be approved with the minor changes recommended by BCOAPO.³⁸⁸

BCOAPO proposes to limit the imposition of a LPC to account balances that are at least 60-days overdue for all residential accounts. BCOAPO submits BC Hydro's LPC:

...is not cost-justified because it imposes a charge on customers before the costs to be recovered by that charge are incurred. BC Hydro imposes its Late Payment Charge on Day 30

³⁸⁷ Ibid., p. 94.

³⁸⁸ Ibid., p. 90.

after a bill is initially issued. Most collection activities costing significant dollars do not begin in that first ten days after the due date of a bill.³⁸⁹

BCOAPO proposes the LPC should at least be reduced to the short-term cost of debt for all residential customers.³⁹⁰ This proposal is discussed in section 6.1.1 of this decision.

BC Hydro's submission on BCOAPO proposals

1. Winter shutoff restrictions

BC Hydro agrees this issue is uncontested.

2. Disconnection delays

BC Hydro states it will be implementing business practices to delay disconnections where customers demonstrate a medical reason for requiring power. BC Hydro proposes allowing an additional 20 business day period where customers can enter into an installment payment plan. BC Hydro submits the additional administrative processes proposed by BCOAPO are impractical.³⁹¹

3. Ban use of external credit scores

BC Hydro is opposed to this proposal and refers to its Rebuttal Evidence which points out that:

...utilities in Canada do not generally provide payment history to third-party credit agencies. Therefore the inevitable consequence of accepting Mr. Colton's recommendation would be that one of three identified options to demonstrate good credit history is removed; that in consequence fewer people could establish a good credit history; and that in the result either more customers would be asked to post security deposits or BC Hydro's bad debt risk would increase.³⁹²

4. Non-cash security deposits

BC Hydro states that BCOAPO's proposal to allow for non-customer guarantors would be expensive and impractical and notes there is no evidence that such a scheme would be cost-effective due to need to sue non-customers to get payment.³⁹³ BC Hydro references its commitment to proposing tariff amendments, as necessary, to allow a third-party customer to take responsibility for a customer's bill, and will be considering how such an arrangement could work with community groups or with broader public organizations.³⁹⁴

³⁸⁹ Ibid., p. 82.

³⁹⁰ Ibid., p. 84.

³⁹¹ BC Hydro Final Argument providing its submission on BCOAP's Final Argument, p. 37.

³⁹² Ibid., pp. 37-38.

³⁹³ Ibid., p. 38.

³⁹⁴ Ibid., pp. 38-39.

5. Set LPC at Weighted Average Cost of Debt

As stated previously, this issue is discussed in section 6.1.1 of this decision.

6. Extend LPC to 60 days after the due date

As stated previously, this issue is discussed in section 6.1.1 of this decision.

Other intervener arguments

CEC supports BC Hydro's position on BCOAPO's proposals for all customers with one exception. CEC notes that BC Hydro has agreed to bring forward a proposal allowing for the use of sureties and guarantors in lieu of cash security deposits. CEC states BCOAPO's requested changes are also reasonable and recommends that the Commission approve BC Hydro's proposal with the changes recommended by BCOAPO.³⁹⁵

BCOAPO reply

With respect to disconnection delays, BCOAPO states, based on BC Hydro's own testimony, that maintaining a "flag" in BC Hydro's customer records to identify particularly vulnerable customers as Mr. Colton recommends is possible with minimal effort.³⁹⁶

BCOAPO submits its proposal to allow for organizations, such as churches or community-based organizations and government organizations, to act as sureties and not be limited to individuals should be approved.³⁹⁷

Commission determination

The Panel acknowledges all parties are in agreement with BC Hydro's proposed winter cut-off restrictions and the Panel agrees the proposed practices are appropriate.

In the Panel's view, BC Hydro's planned changes related to disconnection delays are reasonable. We are concerned that BCOAPO's proposed amendments would result in an increase in administrative effort and we accept BC Hydro's view they may not be practical to implement. However, the Panel does note BCOAPO's argument that maintaining a "flag" in a customer record to identify particularly vulnerable customers may be possible with minimal effort. The Panel expects that BC Hydro will avoid being dogmatic and show some flexibility in the application of its disconnection practices.

The Panel agrees with BC Hydro that use of an external credit scores is an important tool for managing credit risk and accepts BC Hydro's view that if it is banned from using these credit scores it would likely result in more customers being asked to post security deposits or BC Hydro's bad debt risk would increase. **Therefore, the Panel rejects BCOAPO's proposal to ban the use of external credit scores.**

³⁹⁵ CEC Final Argument, p. 69.

³⁹⁶ BCOAPO Reply Argument, p. 41.

³⁹⁷ Ibid., p. 42.

BC Hydro's submission that allowing for non-customer guarantors may not be cost effective due to the need to sue non-customers to get payment has been noted. However, the Panel is not persuaded this risk extends equally to all types of organizations who are not BC Hydro customers. Certain organizations such as churches, community based and government organizations, as suggested by BCOAPO in its reply argument, may not pose a significant credit risk to BC Hydro.

CEC has recommended the Commission approve BC Hydro's proposal with the changes recommended by BCOAPO. The Panel recommends this issue be explored further by BC Hydro in consultation with the low-income advisory group.

BCOAPO's proposal to exempt low income customers from late payment charges is denied. As set out in section 7.1, the Panel finds it does not have jurisdiction to waive LPCs for low-income customers in the absence of an economic or cost of service justification. Accordingly, the Panel agrees with BC Hydro that waiving LPCs for low-income customers would be unduly discriminatory.

7.7 Non-rate recommendations

BCOAPO's non-rate recommendations are as follows:

1. Expansion of ECAP to more low-income customers

Although BCOAPO is not seeking an expenditure order in this proceeding, in response to the RIB Rate Review, it asks for the Commission to recommend that BC Hydro be required to expand installs of BC Hydro's low-income ECAP program to serve a significantly higher percentage of the low-income households than it is currently serving.³⁹⁸

2. Customer segmentation analysis

BCOAPO also asks that the Commission order BC Hydro to conduct a customer segmentation analysis and adopt the National Association of State Utility Consumer Advocates' data reporting recommendations.³⁹⁹

3. Data collection and reporting

BCOAPO is proposing that BC Hydro begin, no later than six months after a final decision is rendered in the 2015 RDA, reporting basic consumer credit and collection activities and outcomes.

4. Low-income customer service unit

BCOAPO requests that BC Hydro establish a dedicated, specially trained low-income customer assistance unit.⁴⁰⁰

³⁹⁸ BCOAPO Final Argument dated September 26, 2016, p. 6.

³⁹⁹ Ibid., p. 6.

⁴⁰⁰ Ibid., p. 103.

5. Low-income advisory group

BCOAPO notes the establishment of the low-income advisory group (LIAG) is uncontested and no Commission order is required.

BC Hydro's submission on BCOAPO proposals

With respect to the expansion of ECAP to more low-income customers, BC Hydro submits:

...the Commission cannot reasonably and fairly assess one program (ECAP) as recommended by Mr. Colton in the absence of evidence regarding the over-arching DSM strategy and individual program justifications that are just being reviewed and developed through IR responses in the separate RRA proceeding that is just getting underway.⁴⁰¹

BC Hydro notes its willingness to engage on the following topics with the soon to be established low-income advisory group:

- Customer segmentation analysis.
- Data collection and reporting.
- Low-income customer assistance unit.

BC Hydro notes the terms of reference of the low-income advisory group are still to be determined but the structure of the group is expected to begin this fall.⁴⁰²

Other intervenor arguments

CEC recommends that the Commission not proceed to propose additional reporting without understanding the cost implications of such reporting.⁴⁰³

BCOAPO reply

In response to BC Hydro, BCOAPO submits that the potential for the low-income advisory group to address these issues does not mean the Commission should avoid weighing in on these proposals:

At a minimum, BCOAPO requests that the Commission assign these issues to the LIAG and direct BC Hydro to report back on these discussions within some reasonable period of time.

BCOAPO states that while it suggested and certainly supports creation of the low-income advisory group, and looks forward to participating, this group “should not be seen as a solution to the issues BCOAPO has raised in this proceeding. The LIAG is complementary to concrete bill affordability measures, not an alternative.”⁴⁰⁴

⁴⁰¹ BC Hydro Final Argument dated October 11, 2016, p. 40.

⁴⁰² Ibid., p. 41.

⁴⁰³ CEC Final Argument, p. 70.

⁴⁰⁴ BCOAPO Reply Argument, p. 43.

In response to CEC, BCOAPO submits in its September 26, 2016 final argument, it provides a detailed description of what BCOAPO is seeking in this proceeding, and so no further response is necessary.

Commission determination

The Panel denies BCOAPO's request for the Commission to recommend BC Hydro be required to expand installs of its low-income ECAP program to serve a significantly higher percentage of the low-income households than it is currently serving. The Panel agrees with BC Hydro that DSM strategy and individual program justifications, including the ECAP program, should be reviewed in the BC Hydro F2017 to F2019 RRA proceeding that is presently before the Commission.

The Panel has no information on the cost or benefits related to BCOAPO's requests for a customer segmentation analysis and other data collection and reporting. The Panel agrees with CEC's recommendation that the Commission should not require additional reporting without understanding the cost and benefits implications of such reporting. Accordingly, the Panel considers it appropriate to refer this issue to the low-income advisory group as suggested by BC Hydro. **BC Hydro is directed to provide an analysis of the costs and benefits associated with BCOAPO's customer segmentation analysis and data collection and reporting within six months of the establishment of the low-income advisory group.** BC Hydro has indicated it is prepared to work collaboratively with the low-income advisory group in this analysis, and the Commission expects that it will do so.

8.0 SUMMARY OF DIRECTIVES

This summary is provided for the convenience of readers. In the event of any difference between the Directions in this Summary and those in the body of the decision, the wording in the decision shall prevail.

DIRECTIVE	REFERENCE
The Panel approves the RIB rate principles as outlined by BC Hydro and summarized above.	22
The Panel has determined it is appropriate to phase out the residential E-Plus rate program over five years commencing April 1, 2017. Therefore, to soften the medium term financial impact on E-Plus customers, BC Hydro is directed to phase out the program over a period of five years.	28
The Panel directs BC Hydro to submit a compliance filing within 30 days of the date of this decision which outlines a proposal for achieving the five-year phase out of the E-Plus program and results in rates being charged to E-Plus customers at the end of the five-year phase-out period which equate to other British Columbia residential customers at that time. Further, the Panel also directs BC Hydro to waive the requirement of having an alternative heating system in working order and eliminate the possibility of service being interrupted as proposed by BCSEA over this transition period.	29

DIRECTIVE	REFERENCE
The Panel approves, effective April 1, 2017, BC Hydro's proposal to retain the existing flat energy rate structure for SGS and to increase the SGS basic charge recovery of customer-related costs from approximately 33 percent to 45 percent on a one-time basis with a one-time offsetting reduction to the energy rate based on the F2016 cost of service study. Thereafter, the annual revenue requirement increase shall be applied equally to all the elements within each rate structure for the SGS rate class.	34
The Panel approves BC Hydro's proposal to: (i) replace the existing MGS two-part energy rate with a flat energy rate; (ii) replace the existing three-step inclining block demand charge with a flat demand charge; and (iii) increase the recovery of demand-related costs in the demand charge from approximately 15 percent to 35 percent, effective April 1, 2017. The Panel approves a one-year transition to the flat rate structure.	34
The Panel approves BC Hydro's proposal to: (i) replace the existing LGS two-part energy rate with a flat energy rate; (ii) replace the existing three-step demand charge with a flat demand charge; and (iii) increase the demand charge recovery of demand-related costs from approximately 50 percent to 65 percent, effective April 1, 2017.	35
The Panel agrees with and approves BC Hydro's proposal for no phase-in period for the new rate structure.	35
The Panel directs that TS No. 82 be terminated.	35
The Panel directs the LGS and MGS control groups taking services under RS 12xx to be dissolved.	35
The Panel directs Rate Schedule 26xx (Exempt Rate for Corix's LGS accounts) be terminated.	36
The Panel approves BC Hydro's proposal for RS 1823.	40
The Panel denies CEBC's request to require BC Hydro to begin consultation on phasing out the inclining block nature of RS 1823 as there is no persuasive evidence on the record to support this proposal and legislative directions require continuation of RS 1823.	40
The Panel approves all other changes to the standard charges as proposed by BC Hydro and directs that the interim Minimum Reconnection Charge established by Order G-175-15 be made permanent effective April 1, 2017.	43
The Panel approves BC Hydro's proposal to maintain the Late Payment Charge at 1.5 percent per month.	46
The Panel declines to approve BCOAPO's request to limit the imposition of LPCs to account balances that are at least 60 days overdue.	46
The Panel declines to approve Zone II ratepayer group's request to direct BC Hydro to	46

DIRECTIVE	REFERENCE
extend the date before LPCs are applied by 10 business days.	
The Panel approves BC Hydro's proposed changes to the Electric Tariff language regarding the application of security deposits.	47
The Panel approves BC Hydro's proposed updates to the general language of the Electric Tariff Terms and Conditions.	47
The Panel acknowledges BC Hydro's commitment to amend the Electric Tariff definition of "Radio-off Meter" to include both the terms "transmit" and "receive" data and we direct BC Hydro to include its proposed wording in its Compliance filing due to the Commission in 30 days.	48
The Panel finds that low-income rates unsupported by an economic or cost of service justification are unjust, unreasonable and unduly discriminatory and are therefore not in accordance with sections 59 - 60 of the UCA.	59
The Panel finds no evidence of legislative intent to provide the Commission with jurisdiction to set low-income rates.	67
The Panel finds there is no evidence that the UCA provides the Commission with the jurisdiction to approve a low income rate in the absence of an economic or a cost of service basis reason.	80
BCOAPO's request to establish an essential services usage block rate for qualified low-income ratepayers is denied.	93
<p>The Panel directs BC Hydro to prepare and file, within six months of the date of the issuance of this decision, a proposed crisis intervention fund pilot program for residential customers who have arrears with BC Hydro and are unable to pay their electricity bills. BC Hydro must include the following information/analysis when filing the proposed crisis intervention fund pilot program plan with the Commission:</p> <ol style="list-style-type: none"> 1. The proposed start and end date of the pilot program, including a discussion of the feasibility of operating the CIF pilot until the next RDA hearing so that the Commission and the parties can obtain a greater understanding of the impact of a CIF; 2. Development of cost/benefit measurement criteria to be able to access the impact of the proposed CIF pilot or program; and 3. Details regarding the implementation and operation of the CIF pilot program,, including the amount of the monthly charge, who and how the CIF will be administered, and the eligibility criteria for ratepayers to access the CIF. 	97-98
BCOAPO's proposals to amend the Electric Tariff to exempt low-income customers from the minimum reconnection charge, the account charge, and the late payment charge, and to waive security deposits for low-income customers are denied.	101

DIRECTIVE	REFERENCE
The Panel rejects BCOAPO's proposal to ban the use of external credit scores.	104
BCOAPO's proposal to exempt low income customers from late payment charges is denied.	105
The Panel denies BCOAPO's request for the Commission to recommend BC Hydro be required to expand installs of its low-income ECAP program to serve a significantly higher percentage of the low-income households than it is currently serving.	107
BC Hydro is directed to provide an analysis of the costs and benefits associated with BCOAPO's customer segmentation analysis and data collection and reporting within six months of the establishment of the low-income advisory group.	107

DATED at the City of Vancouver, in the Province of British Columbia, this 20th day of January 2017.

Original signed by:

 DAVID M. MORTON
 PANEL CHAIR / COMMISSIONER

Original signed by:

 DENNIS A. COTE
 COMMISSIONER

Original signed by:

 KAREN A. KEILTY
 COMMISSIONER

**ORDER NUMBER
G-5-17**

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

and

British Columbia Hydro and Power Authority
2015 Rate Design Application

BEFORE:

D.M. Morton, Commissioner/Panel Chair
D. A. Cote, Commissioner
K. A. Keilty, Commissioner

on January 20, 2017

ORDER

WHEREAS:

- A. On September 24, 2015, the British Columbia Hydro and Power Authority (BC Hydro) filed with the British Columbia Utilities Commission (Commission), pursuant to sections 58-61 of the *Utilities Commission Act*, the first module of a rate design application (2015 RDA);
- B. In the 2015 RDA, BC Hydro sought approvals related to residential, general service and transmission service rates as well as approval to amend the terms and conditions in BC Hydro's Electric Tariff;
- C. By Order G-156-15 dated September 30, 2015 and Order G-166-15 dated October 14, 2015, the Commission established, among other things, a preliminary regulatory timetable for review of the 2015 RDA comprised of an initial round of information requests (IRs) and a procedural conference to be held on January 12, 2016, which was later adjourned to January 19, 2016;
- D. By Order G-175-15 dated November 3, 2015, the Commission determined, among other things, scoping issues related to the Cost of Service Study (COSS) as well as the review processes and timelines related to a number of expedited processes proposed by BC Hydro;
- E. The Commission also approved by Order G-175-15, for the Minimum Reconnection Charge to be set at \$30 per meter on an interim basis, effective December 1, 2015 and approved the establishment of a new deferral account for BC Hydro to record the difference between the reconnection charges collected at the interim rate and the reconnection charges that would have been collected had they been billed at the current rate for the period December 1, 2015 through March 31, 2016;
- F. On December 21, 2015, BC Hydro filed updated Electric Tariff Terms and Conditions;
- G. Subsequent to the procedural conference on January 19, 2016, the Commission issued Order G-12-16 which, among other things, included a regulatory timetable that allowed for a second round of IRs, the filing of an evidentiary update on load resource balance and long-run marginal cost, a timetable for the submission of

intervener evidence, one round of IRs on intervener evidence, and a deadline for BC Hydro's filing of rebuttal evidence. The Commission also established that the COSS and street lighting rate class segmentation would proceed by way of a single Negotiated Settlement Process (NSP);

- H. A Streamlined Review Process (SRP) was held on January 25, 2016, regarding BC Hydro's proposed freshet rate pilot and proposed pricing principles for existing transmission service rates. Following the SRP, the Commission issued Order G-17-16 and attached Reasons for Decision approving the proposed two-year freshet rate pilot with the rate being effective for the period of March 1, 2016 to October 31, 2017;
- I. By Orders G-16-16 and G-20-16 dated February 9, 2016 and February 19, 2016, respectively, the Commission approved amendments to certain medium general service (MGS), large general service (LGS) and transmission rate schedules;
- J. On March 7 and 8, 2016, an NSP was held in Vancouver. Subsequent to the NSP, on April 11, 2016, the Commission issued Order G-47-16 approving the Negotiated Settlement Agreement pertaining to BC Hydro's COSS and street lighting rate class segmentation;
- K. By Order G-50-16 dated April 13, 2016, the Commission amended the regulatory timetable and ordered that an oral hearing be held August 16 through 18 and August 23 through 24, 2016;
- L. By Order G-61-16 dated May 4, 2016, the Commission determined that the review of the Residential E-Plus rate design would proceed by way of a written hearing in accordance with the final argument phase of the 2015 RDA proceeding;
- M. The following interveners filed evidence in the proceeding: Commercial Energy Consumers Association of British Columbia; British Columbia Old Age Pensioners' Organization *et al.* (BCOAPO); and the E-Plus Homeowners Group;
- N. On July 6, 2016, BC Hydro filed rebuttal evidence in response to BCOAPO's intervener evidence;
- O. On August 4, 2016, BC Hydro filed an evidentiary update which included excerpts from its F2017-F2019 Revenue Requirements Application with respect to BC Hydro's load resource balance and long-run marginal cost of new supply;
- P. The oral hearing concluded on August 24, 2016 in Vancouver, and by Commission letter dated August 29, 2016, the Commission determined the schedule for final arguments, which provided for the following:
 - Filing of final arguments from BC Hydro (on orders it seeks from the Commission and the Commission's jurisdiction to approve rates specific to low-income customers) and BCOAPO (related to the orders it seeks from the Commission) on September 26, 2016;
 - Filing of interveners' final arguments and BC Hydro and BCOAPO final arguments in response to each other on October 11, 2016; and
 - Filing of BC Hydro and BCOAPO reply arguments (related to the orders it seeks from the Commission) on October 24, 2016;
- Q. The evidentiary phase of the proceeding closed on August 29, 2016, subject to the delivery of responses to outstanding Undertakings from the oral hearing; and

- R. The Commission has considered the 2015 RDA and the evidence and submissions presented to it, including jurisdictional issues, and makes the following determinations.

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

1. The Residential Inclining Block (RIB) Pricing Principles for each of F2017-F2019 as described in section 5.2.5.1 of the 2015 Rate Design Application (RDA) are approved, effective April 1, 2017.
2. BC Hydro is directed to phase out the Residential E-Plus rate program over five years, commencing April 1, 2017. BC Hydro is directed to submit a compliance filing within 30 days of the date of this decision which outlines a proposal for achieving the five-year phase-out period of the E-Plus program and which results in rates being charged to E-Plus customers at the end of the five-year phase-out period that equate to other British Columbia residential customers at that time. BC Hydro is directed to waive the requirement of having an alternative heating system in working order and to eliminate the possibility of service being interrupted over the five-year transition period.
3. The Small General Service (SGS) rate proposal, as described in section 6.2.1 of the 2015 RDA, is approved effective April 1, 2017.
4. The Medium General Service (MGS) rate proposal, as described in section 6.3.1 of the 2015 RDA, and as shown in the draft tariff sheets in Appendix F-1E of the 2015 RDA, is approved effective April 1, 2017.
5. The Large General Service (LGS) rate proposal, as described in section 6.4.1 of the 2015 RDA, and as shown in the draft tariff sheets in Appendix F-1E of the 2015 RDA, is approved effective April 1, 2017.
6. The General Service – Control Group proposal, as described in section 6.7.2 of the 2015 RDA, and as shown in the draft tariff sheets in Appendix F-1E of the 2015 RDA, is approved effective April 1, 2017.
7. The General Service – Distribution Utilities proposal, as described in section 6.7.3 of the 2015 RDA, is approved effective April 1, 2017.
8. The Tariff Supplement No. 82 proposal, as described in section 6.7.1 of the 2015 RDA, is approved effective April 1, 2017.
9. The Rate Schedule 1823 F2017-F2019 Pricing Principles, as described in section 7.2.2 of the 2015 RDA, are approved effective April 1, 2017.
10. The Electric Tariff proposal, as shown in draft tariff sheets filed on December 21, 2015 as Exhibit B-1-1 and as amended by Appendix C of BC Hydro's Final Argument, is approved effective April 1, 2017.
11. BC Hydro is directed to file tariff sheets regarding the Electric Tariff proposal within 15 business days of the date of this order. BC Hydro is further directed to include the amended definition of "Radio-off Meter" as part of the amended Electric Tariff sheets as part of this filing.
12. BC Hydro is directed to file tariff sheets regarding the SGS, MGS and LGS proposals, and the General Service – Control Group proposal, 30 days prior to the effective date.
13. The Minimum Reconnection interim rate established by the Commission in Order G-175-15, are approved as permanent, effective April 1, 2017.

14. British Columbia Old Age Pensioners' Organization *et al.*'s (BCOAPO) request to establish an essential services usage block (ESUB) rate for qualified low-income ratepayers is denied.
15. The establishment of a pilot Crisis Intervention Fund is approved. BC Hydro is directed to prepare and file, within six months of the date of this order, a proposed crisis assistance pilot program for residential customers who have arrears with BC Hydro and are unable to pay their electricity bills. BC Hydro has indicated that it is prepared to work collaboratively with the low-income advisory group in the development of its proposal, and the Commission expects that it will do so.
16. BCOAPO's proposals to amend the Electric Tariff to exempt low-income customers from the minimum reconnection charge and account charge and to waive security deposits for low-income customers are denied.
17. BCOAPO's proposal to exempt low-income customers from late payment charges and the proposal to ban the use of external credit scores are denied.
18. BCOAPO's request for the Commission to recommend that BC Hydro be required to expand installs of its low-income Energy Conservation Assistance Program is denied.
19. BC Hydro is directed to provide an analysis to the Commission of the costs and benefits associated with BCOAPO's requested customer segmentation analysis and data collection and reporting within six months of the establishment of the low-income advisory group. BC Hydro has indicated it is prepared to work collaboratively with the low-income advisory group in this analysis, and the Commission expects that it will do so.

DATED at the City of Vancouver, in the Province of British Columbia, this 20th day of January 2017.

BY ORDER

Original signed by:

D. M. Morton
Commissioner/Panel Chair

ACRONYM LIST

4CP	4 Coincident Peak
AEUB	Alberta Energy and Utilities Board
AMPC	Association of Major Power Customers
Application, RDA	Rate Design Application, Module 1
BC Hydro	British Columbia Hydro and Power Authority
BCOAPO	British Columbia Old Age Pensioners' Organization, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre
BCSEA	BC Sustainable Energy Association and the Sierra Club of British Columbia
BCSEA	British Columbia Sustainable Energy Association and Sierra Club of British Columbia
CAPP	Canadian Association of Petroleum Producers
CBL	customer baseline load
CEA	Clean Energy Act
CEBC	Clean Energy Association of BC
CEC	Commercial Energy Consumers Association of British Columbia
CIF	crisis intervention fund
CNWEUC	City of New Westminster, Electric Utility Commission
Commission, BCUC	British Columbia Utilities Commission
Corix	Corix Multi-Utility Services Inc.
COS	cost of service
COSS	Cost of Service Study
DAID	Dewdney Area Improvement District
DHH	District of Hudson's Hope
DPA	deferred payment arrangements
DSM	demand side management
ECAPs	Energy Conservation Assistance Program
EGD	Enbridge Gas Distribution Inc.
EPA	energy purchase agreement
EPHG	EPlus Homeowners Group
ESUB	essential services usage block
FortisBC	FortisBC Inc.
GAC	Green Action Centre
HLH	High Load Hours
IEPR	Industrial Electricity Policy Review

ACRONYM LIST

IPP	Independent Power Producer
IR	information requests
IRP	integrated resource plan
LGIC	Lieutenant Governor in Council
LGS	Large General Service
LIAG	low-income advisory group
LICO	low-income cut off
LIEN	Low Income Energy Network
LMRC	Long run marginal cost
LNG	liquefied natural gas
LPC	Late Payment Charge
LRB	Load-Resource Balance
LRMC	Long Run Marginal Cost
MEM	British Columbia Ministry of Energy and Mines
MGS	Medium General Service
MoveUP	Movement of United Professionals
MPUB	Manitoba Public Utilities Board
MSDI	Ministry of Social Development and Social Innovation
NBEUB	New Brunswick Energy and Utilities Board
NCP	non-coincident peak
NEU	City of Vancouver, Neighbourhood Energy Utility
New Westminster	City of New Westminster
New Westminster	City of New Westminster
NIARG	Non-Integrated Areas Ratepayers Group
NIAs	Non-Integrated Areas'
NSA	Negotiated Settlement Agreement
NSCA	Nova Scotia Court of Appeal
NSP	Negotiated Settlement Process
NSUARB	Nova Scotia Utility and Review Board
O&M	operating and maintenance
OEB	Ontario Energy Board
OEB Act	Ontario Energy Board Act
PEC	Progress Energy Canada Ltd.

ACRONYM LIST

PPA	Power Purchase Agreement
PPRD	Peace River Regional District Board
PUA	Public Utilities Act (Nova Scotia)
PVEA	Peace Valley Environment Association
PVLA	Peace Valley Landowner Association
RIB	Residential Inclining Block Rate
RRA	Revenue Requirements Application
RRA	Revenue Requirements Application
RS	Rate Schedule
SFU	Simon Fraser University
SGS	Small General Service
SRP	streamlined review process
TS	Tariff Supplement
TS	Tariff Supplement
TSR	Transmission Service rate
UBC	University of British Columbia
UCA	Utilities Commission Act
WACD	Weighted Average Cost of Debt
YVR	Vancouver Airport Authority
Zonell	Zone II Ratepayers Group

LIST OF APPEARANCES

P. MILLER L. BUSSOLI	Commission Counsel
C. GODSOE I. WEBB J. CHRISTIAN C. FERGUSON T. LOSKI K. ANDERSON G. DOYLE J. MIEDEMA R. REIMAN	British Columbia Hydro and Power Authority
C. WEAVER D. CRAIG	Commercial Energy Consumers' Association of British Columbia
S. KHAN E. PRITCHARD T. PULLMAN	British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, B.C. Poverty Reduction Coalition, Council of Senior Citizens' Organizations of BC, Disability Alliance BC, Together Against Poverty Society, and The Tenant Resource and Advisory Centre
W.J. ANDREWS T. HACKNEY	B.C. Sustainable Energy Association and Sierra Club of British Columbia
D. AUSTIN P. KARIYA	Clean Energy Association of BC
M. KEEN R. STOUT M. MANHAS	Association of Major Power Customers
F. WEISBERG	Non-Integrated Areas Ratepayers Group
L. DONG L. GUENTHER	Zone II Ratepayers Group
B. EDWARDS	Dewdney Area Improvement District
S. CARPENTER	Canadian Association of Petroleum Producers
J. BUCHANAN A. SOPINKA	British Columbia Ministry of Energy and Mines

LIST OF APPEARANCES

L. HERBST D. PERTTULA	FortisBC Energy Inc. and FortisBC Inc.
D. SUNDMARK	Simon Fraser University
L. WORTH J. QUAIL	Movement Of United Professionals
D. KLETAS	Vancouver Airport Authority
G. DELMONTE	Catalyst Paper ,and Association of Major Power Customers of British Columbia
V. PAIVINEN C. MULLER T. MILLER	Association of Major Power Customers of British Columbia
Y. Domingo E. Cheng S. Walsh C. Garand	Commission staff
W. Grant J. Fraser	Contract staff
Allwest Reporting Ltd.	Court Reporters

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

and

British Columbia Hydro and Power Authority
2015 Rate Design Application

EXHIBIT LIST

Exhibit No.	Description
<i>COMMISSION DOCUMENTS</i>	
A-1	Letter dated September 30, 2015 - Appointing the Commission Panel for the review of the BC Hydro 2015 Rate Design Application
A-2	Letter dated September 30, 2015 – Commission Order G-156-15 establishing a Regulatory Timetable and Public Notice of Application
A-3	Letter dated October 14, 2015 - Order G-166-15 Amending the Regulatory Timetable
A-4	Letter dated November 3, 2015 – Order G-175-15 with Reasons for Decision regarding the submissions on Appendix B of Order G-156-15
A-5	Letter dated November 10, 2015 – Commission Information Request No. 1 to BC Hydro
A-6	Letter dated November 16, 2015 – Order G-156-15A Amending time of the Procedural Conference
A-7	Letter dated November 24, 2015 – Commission response to Exhibit C19-3 – J. Priest request for reconsideration of Order G-175-15 determination that the Meter Choices Program is out of scope
A-8	Letter dated January 8, 2016 – Commission request for comments on BC Hydro's request to amend the Regulatory Timetable (Exhibit B-6)
A-9	Letter dated January 8, 2016 – Request for comments on request made by Sharon Noble
A-10	Letter dated January 12, 2016 – Agenda for Procedural Conference
A-11	Letter dated January 15, 2016 – BCUC Rules of Practice and Procedure to parties
A-12	Letter dated January 19, 2016 – Order G-5-16 Intervener Review
A-13	Letter dated January 20, 2016 – Streamlined Review Process for the review of BC Hydro's proposed Freshet Rate Pilot

Exhibit No.	Description
A-14	Letter dated January 22, 2016 –Response to Noble request for legal assistance (Exhibit C28-3)
A-15	Letter dated February 1, 2016 – Commission Order G-12-16 with Reasons for Decision establishing a further regulatory timetable
A-16	Letter dated February 9, 2016 – Commission Order G-16-16 with Reasons for Decision on the Medium General Service and Large General Service 100 percent Part 1 Pricing
A-17	Letter dated February 9, 2016 – Commission Order G-17-16 with Reasons for Decision on the Transmission Service Freshet Rate Pilot
A-18	Letter dated February 11, 2016 – Notification of cost of service study negotiated settlement date, time and venue; and request for submissions
A-19	Letter dated February 16, 2016 – Clarification to Exhibit A-18
A-20	Letter dated February 19, 2016 – Order G-20-16 approving amendments to Rate Schedule 1852 and the status quo for Rate Schedules 1827, 1853 and 1253
A-21	Letter dated February 24, 2016 – Order G-22-16 appointing Liisa O’Hara as facilitator and designating BCUC staff roles for the Cost of Service Study NSP
A-22	Letter dated March 8, 2016 – Commission Information Request No. 2 to BC Hydro
A-23	Letter dated March 17, 2016 – Commission accepting Ms. Noble’s late Information Request No. 2
A-24	Letter dated March 21, 2016 – Request for Comments regarding intervener status of Roger Bryenton
A-25	Letter dated April 5, 2016 – Request for Comments regarding proposed oral hearing dates
A-26	Letter dated April 8, 2016 – Response to Mr. Bryenton’s request for reconsideration of intervener status
A-27	Letter dated April 13, 2016 – Order G-50-16 issuing the amended Regulatory Timetable
A-28	Letter dated April 20, 2016 - Request for written submissions on the review process for the Residential E-Plus rate design (Rate Schedule 1105)
A-29	Letter dated May 4, 2016 – Order G-61-16 issuing the amended Regulatory Timetable
A-30	Letter dated May 30, 2016 – Commission Information Request No. 1 to CEC on Intervener Evidence
A-31	Letter dated May 30, 2016 – Commission Information Request No. 1 to E-Plus Homeowners Group on Intervener Evidence

Exhibit No.	Description
A-32	Letter dated May 30, 2016 – Commission Information Request No. 1 to BCOAPO on Intervener Evidence
A-33	Letter dated June 30, 2016 – Request for submissions regarding CEC’s proposal to establish a non-firm interruptible rate pilot for medium and large general service customers
A-34	Letter dated July 4, 2016 – Requesting parties to advise if they will be cross-examining BCOAPO’s non-expert witnesses who provided direct testimony within BCOAPO’s Evidence, filed as Exhibit C2-12
A-35	Letter dated July 12, 2016 – Request for submissions discussing the review process for CEC’s proposal to establish a non-firm interruptible rate pilot for medium and large general service customers
A-36	Letter dated July 12, 2016 – Confirming that BCOAPO’s non-expert witnesses may stand-down for the oral hearing in August as no formal requests were received from active participants expressing the need to cross-examine these witnesses
A-37	Letter dated August 4, 2016 – Order G-128-16 establishing stakeholder consultation with CEC with respect to CEC’s Rate Pilot Proposal for the medium and large general service customer groups
A-38	Letter dated August 9, 2016 – Procedural Information regarding public hearing procedures
A-39	Letter dated August 29, 2016 – Information regarding argument phase

COMMISSION STAFF DOCUMENTS

A2-1	Submitted at Procedural Conference January 19, 2016 - BCUC STAFF'S PROPOSED SUBMISSIONS AND TIMETABLE
A2-2	Letter dated March 8, 2016 – Commission staff filing Principles of Public Utility Rates, Second Edition – James C. Bonbright (1988)
A2-3	Letter dated March 8, 2016 – Commission staff filing The California Public Utilities Commission – Decision 15-07-001 (July 3, 2015)
A2-4	Letter dated March 8, 2016 – Commission staff filing The Mendota Group, LLC – Benchmark Transmission and Distribution Costs Avoided by Energy Efficiency Investments for Public Service Company of Colorado (October 23, 2014)
A2-5	Submitted at Oral Hearing August 17, 2016 – WITNESS AID "CURRENT CHARGES OF BC HYDRO'S INTERRUPTIBLE RATES THAT ARE WITHOUT UNDERLYING RATES"

Exhibit No.	Description
<i>APPLICANT DOCUMENTS</i>	
B-1	BRITISH COLUMBIA HYDRO AND POWER AUTHORITY (BCH) letter dated September 24, 2015 - 2015 Rate Design Application
B-1-1	Letter dated December 21, 2015 – BCH Filing proposed Electric Tariff amendments and related documents
B-1-2	Letter dated July 13, 2016 – BCH Submitting erratum to the Application
B-2	Letter dated October 13, 2015 – BCH Submission on the five matters raised in Appendix B of Exhibit A-2 Order G-156-15
B-3	Letter dated October 26, 2015 – BCH submitting reply comments on issues in Appendix B to Order G-156-15
B-4	Letter dated November 3, 2015 – BCH submitting Newspaper Ad for Notice of Application and Procedural Conference
B-5	Letter dated December 18, 2015 – BCH Responses to Commission and Interveners Information Request No. 1
B-5-1	CONFIDENTIAL Letter dated December 18, 2015 – BCH Confidential Responses to Commission and Interveners Information Request No. 1
B-5-1-1	CONFIDENTIAL Letter dated May 6, 2016 - BCH Revised Confidential Responses
B-5-1-2	CONFIDENTIAL Letter dated July 13, 2016 - BCH Revised Confidential Responses
B-5-2	Letter dated July 13, 2016 – BCH Submitting Revised Responses to Commission and Interveners Information Request No. 1
B-5-3	Letter dated August 15, 2016 – BCH Submitted Revised Responses to BCOAPO IRs No. 1
B-6	Letter dated January 7, 2016 – BCH Filing Request for an Amendment to the Regulatory Timetable
B-7	Letter dated January 14, 2016 – BCH Submission regarding Ms. Sharon Noble's request for intervener status and additional issues
B-8	Letter dated January 15, 2016 – BCH response to Zone II RPG letter (Exhibit C36-4)
B-9	Submitted at Procedural Conference January 19, 2016 - "BC HYDRO STRAWMAN REGULATORY TIMETABLE FOR RATE DESIGN APPLICATION (RDA) MODULE 1"
B-10	Letter dated January 21, 2016 – BCH submitting F2016 Cost of Service Matters

Exhibit No.	Description
B-11	Letter dated January 21, 2016 – BCH submitting Evidentiary Summary for the Freshet Rate Pilot SRP
B-12	Submitted at Streamlined Review Process January 25, 2016 – BCH Overview of the Freshet Rate
B-13	Letter dated January 29, 2016 – BCH Submission regarding Rate Schedule 1892 - Transmission Service - Freshet Energy
B-14	Letter dated February 12, 2016 – BCH submitting responses to outstanding BCUC and BCOAPO IR's and Errata No. 3
B-15	Exhibit Removed
B-16	Letter dated February 17, 2016 – BCH submitting Comments regarding NSP
B-17	Letter dated February 18, 2016 – BCH submitting Evidentiary Update on Load Resource Balance and Long Run Marginal Cost
B-18	Letter dated February 18, 2016 – BCH submitting Responses to CEC Outstanding IR
B-19	Letter dated February 29, 2016 – BCH submitting Revised Responses to BCOAPO IRs
B-20	Letter dated March 3, 2016 - BCH submitting Evidentiary Summary for the Cost of Service Negotiated Settlement Process
B-21	Letter dated March 24, 2016 – BCH proposing timing for oral public hearing
B-22	Letter dated March 29, 2016 – BCH submitting Comments regarding intervenor status
B-23	Letter dated April 12, 2016 – BCH submitting Response to Commission and Interveners Information Request No. 2
B-23-1	CONFIDENTIAL Letter dated April 12, 2016 – BCH submitting Confidential Response to Commission and Interveners Information Request No. 2
B-23-2	Letter dated July 13, 2016 – BCH Submitting Revised Response to Commission and Interveners Information Request No. 2
B-23-3	Letter dated August 15, 2016 – BCH Submitted Revised Responses to BCOAPO IRs No. 2
B-24	Letter dated April 26, 2016 – BCH on Submission Residential E-Plus rate design
B-25	Letter dated May 3, 2016 – BCH Reply Submission Residential E-Plus rate design

Exhibit No.	Description
B-26	Letter dated May 6, 2016 – BCH submitting Revised Responses to Information Request No. 1 and 2 and Errata to Exhibit B-1
B-26-1	Letter dated July 13, 2016 – BCH Submitting Revised Responses
B-27	Letter dated May 24, 2016 - BCH submitting Request for BCOAPO Confidential Evidence (Exhibit C2-12-1)
B-28	Letter dated May 30, 2016 - BCH submitting IR No.1 to BCOAPO
B-29	Letter dated May 30, 2016 - BCH submitting IR No.1 to CEC
B-30	Letter dated June 17, 2016 - BCH submitting comments regarding E-Plus Homeowners Group (EPHG) Evidence
B-31	Letter dated July 6, 2016 - BCH submitting Rebuttal Evidence
B-32	Letter dated July 7, 2016 - BCH submitting Comments on CEC proposal
B-33	Letter dated July 11, 2016 - BCH submitting comments on witness cross-examination
B-34	Not Assigned
B-35	Letter dated July 18, 2016 - BCH submission on process pertaining to CEC's proposal
B-36	Letter dated August 2, 2016 – BCH response providing additional details of its rebuttal evidence and revised response to CEC IR 2.97.2
B-37	Letter dated August 4, 2016 – BCH submitting its Evidentiary Update
B-38	Letter dated August 9, 2016 – BCH submitting Opening Statement and Direct Testimonies
B-39	Submitted at Oral Hearing August 17, 2016 – BC HYDRO UNDERTAKING NO. 1, TRANSCRIPT VOLUME 3, PAGE 487, LINE 25 TO PAGE 488, LINE 1
B-40	Submitted at Oral Hearing August 17, 2016 – BC HYDRO UNDERTAKING NO. 2, TRANSCRIPT VOLUME 3, PAGE 488, LINES 19 TO 22
B-41	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 3, TRANSCRIPT VOLUME 3, PAGE 495, LINES 6-16
B-42	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 4, TRANSCRIPT VOLUME 3, PAGE 497, LINES 8-19
B-43	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 7, TRANSCRIPT VOLUME 3, PAGE 556, LINES 3-19

Exhibit No.	Description
B-44	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 8, TRANSCRIPT VOLUME 3, PAGE 557, LINES 7-13
B-45	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 9, TRANSCRIPT VOLUME 3, PAGE 558, LINE 17 TO PAGE 559 LINE 10
B-46	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 10, TRANSCRIPT VOLUME 3, PAGE 560, LINES 5-11
B-47	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 11, TRANSCRIPT VOLUME 3, PAGE 560, LINES 13-20
B-48	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 12, TRANSCRIPT VOLUME 3, PAGE 560, LINE 22 TO PAGE 565, LINE 1
B-49	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 13, TRANSCRIPT VOLUME 3, PAGE 567, LINE 26 TO PAGE 568, LINE 11
B-50	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 15, TRANSCRIPT VOLUME 4, PAGE 639, LINES 1-8
B-51	Submitted at Oral Hearing August 18, 2016 – BC HYDRO UNDERTAKING NO. 16, TRANSCRIPT VOLUME 4, PAGE 649, LINES 1-16
B-52	Letter dated August 19, 2016 – BCH submitting Undertaking Nos. 5, 6, 14, 17, 18, 19, 20, 21, 22, 23, 24 and 25
B-53	Submitted at Oral Hearing August 23, 2016 – BCH Undertaking
B-54	Submitted at Oral Hearing August 24, 2016 – BCH UNDERTAKING NO. 27, TRANSCRIPT VOLUME 6, PAGE 1080, LINES 4
B-55	Submitted at Oral Hearing August 24, 2016 – BCH UNDERTAKING NO. 28, TRANSCRIPT VOLUME 6, PAGE 1081, LINES 18 TO 20
B-56	Submitted at Oral Hearing August 24, 2016 – BCH UNDERTAKING NO. 29, TRANSCRIPT VOLUME 7, PAGE 1192, LINE 24 TO PAGE 1193, LINE 9
B-57	Submitted at Oral Hearing August 24, 2016 – BCH OPENING STATEMENT OF GORDON DOYLE (BC HYDRO REBUTTAL EVIDENCE)"
B-58	Letter dated August 25, 2016 – BCH UNDERTAKING NO. 26, Copy of Information Sharing Agreement between BC Hydro and Ministry of Social Development and Social Innovation; REVISED UNDERTAKING NO. 29; and other outstanding commitments from Transcript Volume 7, pages 1366, 1387 Lines 14 to 15; 1388 Line 22; 1389 Lines 23 to 24

Exhibit No.	Description
B-58-1	Letter dated September 6, 2016 – BCH Submitting Correction to Transcript Volume 7, page 1208 Lines 16 to 20
B-59	Letter dated August 29, 2016 – BCH Submitting Comments regarding Argument Timetable
B-60	Letter dated December 8, 2016 - BCH Submitting Compliance with Commission Order No. G-16-16 Directive 3 Transmission Service Freshet Rate Preliminary Evaluation Report for Year 1

INTERVENER DOCUMENTS

C1-1	COMMERCIAL ENERGY CONSUMERS ASSOCIATION OF BRITISH COLUMBIA (CEC) – Letter dated October 1, 2015 requesting intervener status by Christopher Weafer
C1-2	Letter dated October 14, 2015 – CEC Submission on Issues in Appendix B to Order G-156-15
C1-3	Letter dated October 26, 2015 – CEC submitting reply comments on issues in Appendix B to Order G-156-15
C1-4	Letter dated November 17, 2015 – CEC submitting IR No. 1 to BC Hydro
C1-5	Letter dated February 15, 2016 - CEC submitting comments regarding representation of DAID
C1-6	Letter dated February 16, 2016 - CEC submitting Comments regarding NSP
C1-7	Letter dated March 8, 2016 – CEC submitting IR No. 2 to BC Hydro
C1-8	Letter dated April 6, 2016 - CEC submitting Comments Regarding Timetable
C1-9	Letter dated April 26, 2016 – CEC on Submission Residential E-Plus rate design
C1-10	Letter dated May 9, 2016 - CEC submitting Evidence
C1-11	Letter dated May 30, 2016 – CEC IR No. 1 to BCOAPO on Intervener Evidence
C1-12	Letter dated June 22, 2016 - CEC submitting response to Information Request No.1 to BC Hydro
C1-13	Letter dated June 22, 2016 - CEC submitting response to Information Request No.1 to BCOAPO
C1-14	Letter dated June 22, 2016 - CEC submitting response to Information Request No.1 to AMPC

Exhibit No.	Description
C1-15	Letter dated June 22, 2016 - CEC submitting response to Information Request No.1 to BCUC
C1-16	Letter dated June 22, 2016 - CEC submitting response to Information Request No.1 to BCSEA
C1-17	Letter dated July 8, 2016 - CEC submitting comments on the cross-examination of non-expert witnesses
C1-18	Letter dated July 22, 2016 – CEC Reply Submission on process
C1-19	Submitted at Oral Hearing August 24, 2016 – CEC Filing LETTER DATED AUGUST 17,2016 FROM BC HYDRO TO BCUC WITH ATTACHMENTS
C1-20	Submitted at Oral Hearing August 24, 2016 – CEC Filing DOCUMENT TITLED "HYDRO'S TWO-STEP RATE DESIGN TO DRIVE CONSERVATION" DATED SEPTEMBER 4, 2008
C1-21	Submitted at Oral Hearing August 24, 2016 – CEC Filing DOCUMENT TITLED "RESIDENTIAL CONSERVATION RATE" TAKEN FROM THE BC HYDRO WEBSITE
C2-1	BRITISH COLUMBIA OLD AGE PENSIONERS' ORGANIZATION, DISABILITY ALLIANCE BC, COUNCIL OF SENIOR CITIZENS' ORGANIZATIONS OF BC, AND THE TENANT RESOURCE AND ADVISORY CENTRE (BCOAPO) – Letter dated October 1, 2015 requesting intervener status by Sarah Khan and Erin Pritchard
C2-2	Letter dated October 14, 2015 – BCOAPO Submission on Issues in Appendix B to Order G-156-15
C2-3	Letter dated October 26, 2015 – BCOAPO Reply Submission
C2-4	Letter dated November 17, 2015 – BCOAPO submitting IR No. 1 to BC Hydro
C2-4-1	Letter dated November 18, 2015 – BCOAPO submitting amended IR No. 1 to BC Hydro correcting the sub-numbering
C2-5	Letter dated January 14, 2016 – BCOAPO Submission regarding Ms. Sharon Noble's request for intervener status
C2-6	Letter dated February 16, 2016 - BCOAPO submitting Comments regarding NSP
C2-7	Letter dated March 8, 2016 – BCOAPO submitting IR No. 2 to BC Hydro
C2-8	Letter dated March 29, 2016 – BCOAPO submitting Comments regarding intervener status
C2-9	Letter dated March 31, 2016 – BCOAPO submitting Extension Request
C2-10	Letter dated April 6, 2016 - BCOAPO submitting Comments Regarding Timetable

Exhibit No.	Description
C2-11	Letter dated April 26, 2016 – BCOAPO on Submission Residential E-Plus rate design
C2-12	Letter dated May 9, 2016 - BCOAPO submitting Evidence
C2-12-1	CONFIDENTIAL Letter dated May 9, 2016 - BCOAPO submitting Confidential Evidence
C2-13	Letter dated May 24, 2016 - BCOAPO submitting Comments regarding Evidence
C2-14	Letter dated May 25, 2016 - BCOAPO submitting K. Simmonds Evidence
C2-15	Letter dated May 30, 2016 – BCOAPO submitting IR No. 1 to CEC
C2-16	Letter dated May 30, 2016 – BCOAPO submitting IR No. 1 to EPHG
C2-17	Letter dated June 22, 2016 - BCOAPO submitting response to Information Request No.1 to BC Hydro
C2-18	Letter dated June 22, 2016 - BCOAPO submitting response to Information Request No.1 to BCSEA
C2-19	Letter dated June 22, 2016 - BCOAPO submitting response to Information Request No.1 to BCUC
C2-20	Letter dated June 22, 2016 - BCOAPO submitting response to Information Request No.1 to CEC
C2-21	Letter dated June 22, 2016 - BCOAPO submitting response to Information Request No.1 to MoveUp
C2-22	Letter dated June 22, 2016 - BCOAPO submitting response to Information Request No.1 to Zonell
C2-23	Letter dated July 6, 2016 - BCOAPO submitting Comments on CEC proposal
C2-24	Letter dated July 6, 2016 - BCOAPO submitting Confidentiality Undertaking for Tony Pullman
C2-25	Letter dated July 6, 2016 - BCOAPO submitting Confidentiality Undertaking for Roger Colton
C2-26	Letter dated July 6, 2016 - BCOAPO submitting Confidentiality Undertaking for Bill Harper
C2-27	Letter dated July 6, 2016 - BCOAPO submitting Confidentiality Undertaking for Sarah Khan
C2-28	Letter dated July 6, 2016 - BCOAPO submitting Confidentiality Undertaking for Erin Pritchard

Exhibit No.	Description
C2-29	Letter dated July 18, 2016 - BCOAPO submission on process pertaining to CEC's proposal
C2-30	Submitted at Oral Hearing August 16, 2016 – BCOAPO Filing UPDATED DSM PLAN FROM BCH F2017-19 REVENUE REQUIREMENTS APPLICATION
C2-31	Submitted at Oral Hearing August 16, 2016 – BCOAPO Filing DSM INITIATIVE STRATEGY FROM BCH F2017-19 REVENUE REQUIREMENTS APPLICATION
C2-32	Submitted at Oral Hearing August 16, 2016 – BCOAPO Filing 2013 10 YEAR RATES PLAN FROM BCH F2017-19 REVENUE REQUIREMENTS APPLICATION
C2-33	Submitted at Oral Hearing August 16, 2016 – BCOAPO Filing OPENING STATEMENT OF SETH KLEIN
C2-34	Submitted at Oral Hearing August 17, 2016 – BCOAPO Filing "DISTRIBUTION CUSTOMER ALLOCATORS" CHART
C2-35	Submitted at Oral Hearing August 18, 2016 – BCOAPO REVISED CROSS-EXHIBIT 1 ON PRICE ELASTICITY, TABLE
C2-36	Submitted at Oral Hearing August 18, 2016 – BCOAPO CROSS EXHIBIT 2, "WATER AFFORDABILITY IN PHILADELPHIA..."
C2-37	Submitted at Oral Hearing August 18, 2016 – BCOAPO CROSS EXHIBIT 3
C2-38	Letter dated August 22, 2016 – BCOAPO Filing Opening Statement of Roger Colton and Summary of Colton Recommendations
C2-39	Submitted at Oral Hearing August 23, 2016 – BCOAPO FOUR PAGE ERRATA TO MR. COLTON'S REPORT
C2-40	Submitted at Oral Hearing August 23, 2016 – BCOAPO THREE PAGE ERRATA TO MR. COLTON'S REPORT
C2-41	Submitted at Oral Hearing August 23, 2016 – BCOAPO THREE GRAPHS, "SCHEDULE RDC-3", ERRATA TO MR. COLTON'S REPORT
C2-42	Submitted at Oral Hearing August 23, 2016 – BCOAPO CROSS EXHIBITS 4 AND 5
C2-43	Submitted at Oral Hearing August 23, 2016 – BCOAPO CROSS EXHIBIT 6
C2-44	Submitted at Oral Hearing August 23, 2016 – BCOAPO CROSS EXHIBIT 7
C2-45	Submitted at Oral Hearing August 23, 2016 – BCOAPO CROSS EXHIBIT 8

Exhibit No.	Description
C2-46	Submitted at Oral Hearing August 23, 2016 – BCOAPO EXCERPT FROM "BC HYDRO TERMS AND CONDITIONS, EFFECTIVE: 01 APRIL 2008"
C2-47	Submitted at Oral Hearing August 23, 2016 – BCOAPO TWO PAGE DOCUMENT HEADED "BCOAPO IR 1.204.1 ATTACHMENT 1"
C2-48	Letter dated September 9, 2016 – BCOAPO Submitting Undertaking No. 1
C3-1	BC SUSTAINABLE ENERGY ASSOCIATION AND THE SIERRA CLUB OF BRITISH COLUMBIA (BCSEA) – Letter dated October 2, 2015 requesting intervener status by William Andrews and Thomas Hackney
C3-2	Letter dated October 14, 2015 – BCSEA Submitting Comments
C3-3	Letter dated November 17, 2015 – BCSEA submitting IR No. 1 to BC Hydro
C3-4	Letter dated January 14, 2016 – BCSEA Submission on Ms. Noble's request
C3-5	Letter dated February 16, 2016 - BCSEA submitting Comments regarding NSP
C3-6	Letter dated March 8, 2016 – BCSEA submitting IR No. 2 to BC Hydro
C3-7	Letter dated March 23, 2016 – BCSEA submitting comments on Bryenton intervener status
C3-8	Letter dated April 6, 2016 - BCSEA submitting Comments Regarding Timetable
C3-9	Letter dated April 21, 2016 – BCSEA Submitting Comments on Residential E-Plus Rate Design
C3-10	Letter dated May 3, 2016 – BCSEA Submitting Reply Comments on Residential E-Plus Rate Design
C3-11	Letter dated May 27, 2016 – BCSEA submitting IR No. 1 to BCOAPO
C3-12	Letter dated May 27, 2016 – BCSEA submitting IR No. 1 to EPHG
C3-13	Letter dated May 27, 2016 – BCSEA submitting IR No. 1 to CEC
C3-14	Letter dated July 4, 2016 – BCSEA submitting comments on cross-examination of evidence (Exhibit A-34)
C3-15	Letter dated July 5, 2016 - BCSEA submitting Comments on CEC proposal
C3-16	Letter dated July 15, 2016 - BCSEA submitting Comments
C3-17	Submitted at Oral Hearing August 23, 2016 – BCSEA Filing TWO-PAGE PRINTOUT FROM BC HYDRO WEBSITE, "WAYS TO PAY YOUR BILL"

Exhibit No.	Description
C4-1	MOVEMENT OF UNITED PROFESSIONALS (MOVEUP) (formerly Canadian Office and Professional Employees' Union, Local 378) Letter dated October 8, 2015 requesting intervener status by Leigha Worth, Jim Quail and Iain Reeve
C4-2	Letter dated October 14, 2015 – COPE Submission on Issues in Appendix B to Order G-156-15
C4-3	Letter dated November 16, 2015 – COPE advise that Marvin Shaffer has been retained as an expert consultant
C4-4	Letter dated November 17, 2015 – COPE submitting IR No. 1 to BC Hydro
C4-5	Letter dated December 16, 2015 – COPE Notice of Name Change
C4-6	Letter dated February 17, 2016 - MoveUp submitting Comments regarding NSP
C4-7	Letter dated March 8, 2016 – MoveUp submitting IR No. 2 to BC Hydro
C4-8	Letter dated April 11, 2016 – MoveUp Comments regarding proposed oral hearing dates
C4-9	Letter dated May 30, 2016 – MoveUp IR No. 1 to BCOAPO on Intervener Evidence
C4-10	Letter dated July 7, 2016 - MoveUp submitting Comments on CEC proposal
C4-11	Letter dated July 11, 2016 - MoveUp submitting comments on the cross-examination of non-expert witnesses
C4-12	Submitted at Oral Hearing August 16, 2016 – MoveUp Filing BCH JUNE 23, 2016 LETTER TO BCUC
C5-1	BRITISH COLUMBIA MINISTRY OF ENERGY AND MINES (MEM) Letter dated October 8, 2015 - Requesting intervener status by Jack Buchanan and Amy Sopinka
C5-2	Letter dated February 18, 2016 - MEM submitting Comments regarding NSP
C6-1	PEACE RIVER REGIONAL DISTRICT BOARD (PPRD) Letter dated October 8, 2015 - Requesting intervener status by Jo-Anne Frank
C7-1	SIMON FRASER UNIVERSITY (SFU) Letter dated October 7, 2015 - Requesting intervener status by Ron Sue
C8-1	UNIVERSITY OF BRITISH COLUMBIA (UBC) Letter dated October 13, 2015 - Requesting intervener status by Orion Henderson
C9-1	PEACE VALLEY ENVIRONMENT ASSOCIATION (PVEA) Letter dated October 13, 2015 - Requesting intervener status by Andrea Morison, and Dr. Adrienne Peacock

Exhibit No.	Description
C10-1	EPLUS HOMEOWNERS GROUP (EPHG) Letter dated October 13, 2015 - Requesting intervener status by Gary McCaig
C10-2	Letter dated January 5, 2016 – EPHG Submitting Comments
C10-3	Letter dated April 25, 2016 – EPHG on Submission Residential E-Plus rate design
C10-4	Letter dated May 18, 2016 - EPHG submitting Evidence
C10-4-1	Letter dated August 2, 2016 – EPHG submitting reference documents for Evidence
C10-5	Letter dated June 21, 2016 - EPHG submitting response to Information Request No.1 to BCSEA
C10-6	Letter dated June 22, 2016 - EPHG submitting response to Information Request No.1 to BCOAPO
C10-7	Letter dated June 22, 2016 - EPHG submitting response to Information Request No.1 to BCUC
C11-1	BRYENTON, ROGER (BRYENTON) Letter dated October 13, 2015 - Requesting intervener status by Roger Bryenton - Intervener Status Rescinded on November 3, 2015 – See Exhibit A-4 - Intervener Status Rescinded – See Exhibit A-4
C11-2	Letter dated October 14, 2015 – Bryenton Submitting Comments
C11-3	Letter dated October 27, 2015 – Bryenton Submitting Response to BC Hydro
C12-1	ASSOCIATION OF MAJOR POWER CUSTOMERS (AMPC) Letter dated October 14, 2015 - Requesting intervener status by Brian Wallace, Matthew Keen and Richard Stout
C12-2	Letter dated October 14, 2015 – AMPC Submission on Issues in Appendix B to Order G-156-15
C12-3	Letter dated October 26, 2015 – AMPC submitting reply comments on issues in Appendix B to Order G-156-15
C12-4	Letter dated November 17, 2015 – AMPC submitting IR No. 1 to BC Hydro
C12-5	Letter dated February 16, 2016 - AMPC submitting Comments regarding NSP
C12-6	Letter dated February 18, 2016 - AMPC submitting Comments regarding NSP Facilitator
C12-7	Letter dated March 8, 2016 – AMPC submitting IR No. 2 to BC Hydro
C12-8	Letter dated April 11, 2016 – AMPC Comments regarding proposed oral hearing dates

Exhibit No.	Description
C12-9	Letter dated April 21, 2016 – AMPC Submitting Comments on Residential E-Plus Rate Design
C12-10	Letter dated May 2, 2016 – AMPC Submitting Further Comments on Residential E-Plus Rate Design
C12-11	Letter dated May 30, 2016 – AMPC submitting IR No. 1 to CEC
C12-12	Letter dated July 7, 2016 - AMPC submitting Comments on CEC proposal
C12-13	Letter dated July 7, 2016 - AMPC submitting Comments on Cross-Examination of BCOAPO Witnesses
C12-14	Letter dated July 18, 2016 - AMPC submission on process pertaining to CEC's proposal
C12-15	Submitted at Oral Hearing August 17, 2016 – AMPC Filing EXCERPT FROM BC HYDRO "F2011 DEMAND SIDE MANAGEMENT MILESTONE EVALUATION SUMMARY REPORT, DECEMBER 2011
C13-1	CANADIAN ASSOCIATION OF PETROLEUM PRODUCERS (CAPP) Letter dated October 14, 2015 – Submission and Requesting intervener status by Mark Pinney
C14-1	PEACE VALLEY LANDOWNER ASSOCIATION (PVLA) Letter dated October 14, 2015 - Requesting intervener status by Ken Boon
C15-1	VANCOUVER AIRPORT AUTHORITY (YVR) Letter dated October 14, 2015 - Requesting intervener status by Peter Kletas
C16-1	CLEAN ENERGY ASSOCIATION OF BC (CEBC) Letter dated October 14, 2015 - Requesting intervener status by Clark Wilson, Jim Weimer, Paul Kariya, and David Austin
C16-2	Letter dated November 17, 2015 – CEBC submitting IR No. 1 to BC Hydro
C16-3	Letter dated March 8, 2016 – CEBC submitting IR No. 2 to BC Hydro
C17-1	LYBECK, GARRY (LYBECK) Letter dated October 13, 2015 - Requesting intervener status by Garry Lybeck - Intervener Status Rescinded – See Exhibit A-4
C18-1	PROGRESS ENERGY CANADA LTD. (PEC) Letter dated October 14, 2015 - Requesting intervener status by Matt Good
C19-1	PRIEST, JAYNE (PRIEST) Letter dated October 13, 2015 - Requesting intervener status by Jayne Priest - Intervener Status Rescinded – See Exhibit A-7
C19-2	Letter dated October 19, 2015 – Priest Submission on Appendix B
C19-2-1	Letter dated October 19, 2015 – Priest Submission on Appendix B Corrected

Exhibit No.	Description
C19-3	Letter dated November 6, 2015 – Priest Submitting Reconsideration Request
C20-1	KAROW, HANS (KAROW) Letter dated October 14, 2015 - Requesting intervener status by Hans Karow
C20-2	Letter dated January 11, 2016 – Karow Submitting Intervention Comments
C20-3	Submitted at Procedural Conference January 19, 2016 - Karow Submitting Letter
C21-1	HOFFMANN, JANIS (J-HOFFMANN) Letter dated October 14, 2015 - Requesting intervener status by Janis Hoffmann - Intervener Status Rescinded – See Exhibit A-4
C21-2	Letter dated October 22, 2015 – J-Hoffmann Submission on Appendix B
C21-3	Letter dated January 25, 2016 – Requesting Intervener status by Janis Hoffman
C22-1	NON-INTEGRATED AREAS RATEPAYERS GROUP (NIARG) Letter dated October 14, 2015 - Requesting intervener status by Fred Weisberg
C22-2	Letter dated October 19, 2015 – NIARG Submission on Appendix B
C22-3	Letter dated February 16, 2016 - NIARG submitting Comments regarding NSP
C22-4	Letter dated March 6, 2016 - NIARG Submission regarding Intervention
C22-5	Letter dated March 8, 2016 – NIARG submitting IR No. 2 to BC Hydro
C22-6	Letter dated April 6, 2016 - NIARG submitting Comments Regarding Timetable
C22-7	Letter dated July 8, 2016 - NIARG submitting Comments on CEC proposal
C22-8	Letter dated July 11, 2016 - NIARG submitting comments on witness cross-examination
C22-9	Letter dated July 18, 2016 - NIARG submission on process pertaining to CEC’s proposal
C23-1	TUCKER, BOB (TUCKER) Letter dated October 14, 2015 - Requesting intervener status by Bob Tucker - Intervener Status Rescinded – See Exhibit A-4
C23-2	Letter dated January 26, 2016 – Requesting Intervener status by Bob Tucker
C24-1	RIDOUT, SHERRY Letter dated October 14, 2015 - Requesting intervener status by Sherry Ridout - Intervener Status Rescinded – See Exhibit A-4
C24-2	Letter dated January 29, 2016 - Intervener status by Sherry Ridout
C25-1	HOFFMANN, LORI (L-HOFFMANN) Letter dated October 14, 2015 - Requesting intervener status by Lori Hoffmann - Intervener Status Rescinded – See Exhibit A-4

Exhibit No.	Description
C25-2	Letter dated October 19, 2015 – L-Hoffmann Submission on Appendix B
C26-1	FORTISBC (FORTISBC) Letter dated October 14, 2015 - Requesting intervener status by Diane Roy and Submission on Issues in Appendix B to Order G-156-15
C26-2	Letter dated November 17, 2015 – FortisBC submitting IR No. 1 to BC Hydro
C26-3	Letter dated February 18, 2016 - FortisBC submitting Comments regarding NSP
C26-4	Letter dated April 11, 2016 – FortisBC Comments regarding proposed oral hearing dates
C27-1	DISTRICT OF HUDSON'S HOPE (DHH) Letter dated October 14, 2015 - Requesting intervener status by Tom Matus
C28-1	NOBLE, SHARON (NOBLE) Letter dated October 13, 2015 - Requesting intervener status by Sharon Noble
C28-2	Letter dated October 19, 2015 – Noble Submission on Appendix B
C28-3	Letter dated January 18, 2016 – Noble request for legal assistance
C28-4	Letter dated March 11, 2016 - Noble Late IR No.2
C29-1	RAMAGE, DIANNE (RAMAGE) Letter dated October 7, 2015 - Requesting intervener status by Dianne Ramage
C30-1	DEWDNEY AREA IMPROVEMENT DISTRICT (DAID) Letter dated October 14, 2015 - Requesting intervener status by Bruce Edwards
C30-2	Letter dated October 19, 2015 – DAID Submission on Appendix B
C31-1	EDWARDS, BRUCE (EDWARDS) Letter dated October 14, 2015 - Requesting intervener status by Bruce Edwards - Intervener Status Rescinded – See Exhibit A-4
C31-2	Letter dated October 19, 2015 – Edwards Submission on Appendix B
C32-1	ERVIN, JIM Letter dated October 17, 2015 – Requesting late intervener status by Jim Ervin - Intervener Status Rescinded – See Exhibit A-4
C33-1	CITY OF NEW WESTMINSTER, ELECTRIC UTILITY COMMISSION (CNWEUC) Letter dated October 15, 2015 – Requesting late intervener status by R. Carle
C34-1	RANKIN, ETHELYN (RANKIN) Letter dated October 16, 2015 – Requesting late intervener status by Ethelyn Rankin - Intervener Status Rescinded – See Exhibit A-4
C35-1	CITY OF VANCOUVER, NEIGHBOURHOOD ENERGY UTILITY (NEU) Letter dated November 6, 2015 – Requesting late intervener status by Kieran McConnell

Exhibit No.	Description
C35-2	Letter dated November 17, 2015 – NEU submitting IR No. 1 to BC Hydro
C36-1	ZONE II RATEPAYERS GROUP (ZONELL) Letter dated November 6, 2015 – Requesting late intervener status by Linda Dong
C36-2	Letter dated November 9, 2015 – Zonell Submitting Further Information
C36-3	Letter dated November 17, 2015 – Zonell submitting IR No. 1 to BC Hydro
C36-4	Letter dated January 8, 2016 – Zonell Submitting Comments to Include Zone II rates in Module 1
C36-5	Letter dated January 11, 2016 – Zonell Submitting Comments regarding Amendment to Regulatory Timetable
C36-6	Letter dated January 15, 2016 – Zonell Submitting Comments regarding Agenda for Procedural Conference
C36-6-1	Letter dated January 18, 2016 – Zonell Submitting amended document reflecting the status of Coastal First Nations
C36-7	Letter dated February 16, 2016 - Zonell submitting Comments regarding NSP
C36-8	Letter dated March 8, 2016 – Zonell submitting IR No. 2 to BC Hydro
C36-9	Letter dated April 11, 2016 – Zonell Comments regarding proposed oral hearing dates
C36-10	Letter dated April 21, 2016 – Zonell Submitting Comments on Residential E-Plus Rate Design
C36-11	Letter dated May 3, 2016 – Zonell Submitting Reply Comments on Residential E-Plus Rate Design
C36-12	Letter dated May 30, 2016 – Zonell submitting IR No. 1 to BCOAPO
C36-13	Letter dated July 5, 2016 - Zonell submitting Confirmation of Witness Cross-examination
C36-14	Letter dated July 7, 2016 - Zonell submitting Comments on CEC proposal
C36-15	Letter dated July 18, 2016 - Zonell submission on process pertaining to CEC's proposal
C36-16	Letter dated August 10, 2016 – Zonell submitting Comments on BC Hydro's Opening Statement and Direct Testimonies (Exhibit B-38)
C36-17	Submitted at Oral Hearing August 16, 2016 – Zonell Filing DOCUMENT PACKAGE
C36-18	Submitted at Oral Hearing August 23, 2016 – Zonell Filing TWO-PAGE DOCUMENT FROM BC HYDRO WEBSITE, "HEAT PUMP REBATE"

Exhibit No.	Description
C36-19	Submitted at Oral Hearing August 23, 2016 – Zonell Filing TWO-PAGE NETWORKBC CONNECTIVITY MAP
C36-20	Submitted at Oral Hearing August 23, 2016 – Zonell Filing TWO-PAGE NETWORKBC CONNECBANK LISTINGS IN NORTHERN BC FROM CANPAGESTIVITY MAP
C37-1	GREAT BEAR INITIATIVE (GBI) Letter dated November 10, 2015 – Requesting late intervener status by Gillian Vines
C37-2	Letter dated July 6, 2016 – GBI Withdrawing Intervener Status

INTERESTED PARTY DOCUMENTS

D-1	TECK RESOURCES LTD. (TECK) – Letter dated October 2, 2015 requesting interested party status by Terry Brace
D-2	BARZ, DON (BARZ) – Letter dated October 14, 2015 requesting interested party status by Don Barz
D-3	TRANSLINK (TRANSLINK) – Letter dated November 27, 2015 requesting interested party status by Kevin Bonin
D-4	BRYENTON, ROGER (BRYENTON) – April 8, 2016 email request for interested party status
D-5	DOGWOODVALLEY HOME OWNERS (DHO) – Online Registration dated August 23, 2016 requesting interested party status by Carl Schepannek
D-6	STOLL, ARTHUR – Online Registration dated August 26, 2016 requesting interested party status by Arthur Stoll

LETTERS OF COMMENT

E-1	Kellenberger, D - Letter of comment dated September 12, 2015
E-2	Norton, D - Letter of comment dated September 10, 2015
E-3	Vrieling - Letter of comment dated April 13, 2015
E-4	Hoffmann, J Letter of comment dated December 26, 2015
E-4-1	Hoffmann, J Letter of comment dated January 7, 2016
E-4-2	Hoffmann, J Letter supporting S Noble’s intervention request dated January 11, 2016

Exhibit No.	Description
E-4-3	Hoffmann, J Letter submitting comments regarding S Noble's intervention request dated January 13, 2016
E-5	McKechnie, B Letter of comment dated January 8, 2016
E-5-1	McKechnie, B Letter supporting S Noble's intervention request dated January 14, 2016
E-6	Ridout Letter of comment dated January 9, 2016
E-7	Andrew, RA Letter supporting S Noble's intervention request dated January 9, 2016
E-8	Biggar, R Letter supporting S Noble's intervention request dated January 9, 2016
E-9	Bolin, R Letter supporting S Noble's intervention request dated January 10, 2016
E-10	Clapperton, D Letter supporting S Noble's intervention request dated January 9, 2016
E-11	Dalton, D Letter supporting S Noble's intervention request dated January 11, 2016
E-12	Fitzpatrick, R Letter supporting S Noble's intervention request dated January 9, 2016
E-13	Hall, C Hannah, P Letter supporting S Noble's intervention request dated January 10, 2016
E-14	Hannah, P Letter supporting S Noble's intervention request dated January 9, 2016
E-15	Hargitt, C Hannah, P Letter supporting S Noble's intervention request dated January 10, 2016
E-16	Laing, R Letter supporting S Noble's intervention request dated January 9, 2016
E-17	McNutt, R Letter supporting S Noble's intervention request dated January 11, 2016
E-18	Ortega, AR Letter supporting S Noble's intervention request dated January 9, 2016
E-19	Siperka, L Letter supporting S Noble's intervention request dated January 9, 2016
E-20	Sparacino, J Laing, R Letter supporting S Noble's intervention request dated January 9, 2016
E-21	Stachow, J Laing, R Letter supporting S Noble's intervention request dated January 9, 2016
E-22	Verduyn, P Laing, R Letter supporting S Noble's intervention request dated January 9, 2016
E-23	Waterhouse, D Laing, R Letter supporting S Noble's intervention request dated January 9, 2016
E-24	Andersen, H Laing, R Letter supporting S Noble's intervention request dated January 13, 2016

Exhibit No.	Description
E-25	Baravalle, B Letter supporting S Noble's intervention request dated January 11, 2016
E-26	Dube, N Letter supporting S Noble's intervention request dated January 12, 2016
E-27	Forbes, K Letter supporting S Noble's intervention request dated January 9, 2016
E-28	Hansen, E Letter supporting S Noble's intervention request dated January 10, 2016
E-29	Hargitt, C Letter supporting S Noble's intervention request dated January 12, 2016
E-30	Pickett, T Letter supporting S Noble's intervention request dated January 10, 2016
E-31	Garnet, L Letter supporting S Noble's intervention request dated January 14, 2016
E-32	Halliday, C Letter supporting S Noble's intervention request dated January 9, 2016
E-33	MacGillivray, E Letter of Comment dated January 4, 2016
E-33-1	MacGillivray, E Letter supporting S Noble's intervention request dated January 10, 2016
E-34	Pratt, S Letter of Comment dated January 13, 2016
E-34-1	Pratt, S Letter supporting S Noble's intervention request dated January 13, 2016
E-35	Vey, M Letter supporting S Noble's intervention request dated January 13, 2016
E-36	O'Donnell, F Letter of Comment dated January 7, 2016
E-36-1	O'Donnell, F Letter of Comment dated January 7, 2016
E-37	North Westside Ratepayers Association Letter of Comment dated January 23, 2015
E-38	Green, D Letter of Comment dated March 7, 2016
E-39	Shandler, J Letter of Comment dated March 15, 2016
E-40	Neiboer, M Letter of Comment dated March 28, 2016
E-40-1	Neiboer, M Letter of Comment dated August 23, 2016
E-41	Wilford, C Letter of Comment dated May 21, 2016