

D Barry Kirkham, QC*
James D Burns*
Jeffrey B Lightfoot*
Christopher P Weafer*
Michael P Vaughan
Heather E Maconachie
Michael F Robson*
Zachary J Ansley*
George J Roper
Patrick J O'Neill

Robin C Macfarlane*
Duncan J Manson*
Daniel W Burnett, QC*
Ronald G Paton*
Gregory J Tucker, QC*
Terence W Yu*
James H McBeath*
Edith A Ryan*
Daniel H Coles
Jordan A Michaux

Douglas R Johnson*
Alan A Frydenlund, QC*
Harvey S Delaney*
Paul J Brown*
Karen S Thompson*
Harley J Harris*
Paul A Brackstone**
James W Zaitsoff*
Jocelyn M Le Dressay

Josephine M Nadel*
Allison R Kuchta*
James L Carpick*
Patrick J Haberl*
Gary M Yaffe*
Jonathan L Williams*
Scott H Stephens*
Pamela E Sheppard
Katharina R Spotzi

Carl J Pines, Associate Counsel*
Rose-Mary L Basham, QC, Associate Counsel*
Hon Walter S Owen, QC, QC, LLD (1981)
John I Bird, QC (2005)

* Law Corporation
* Also of the Yukon Bar

OWEN BIRD
LAW CORPORATION

PO Box 49130
Three Bentall Centre
2900-595 Burrard Street
Vancouver, BC
Canada V7X 1J5

June 22, 2016

VIA ELECTRONIC MAIL

British Columbia Utilities Commission
Sixth Floor, 900 Howe Street
Vancouver, BC
V6Z 2N3

Telephone 604 688-0401
Fax 604 688-2827
Website www.owenbird.com
Direct Line: 604 691-7557
Direct Fax: 604 632-4482
E-mail: cweafer@owenbird.com
Our File: 23841/0131

Attention: Ms. Laurel Ross, Acting Commission Secretary and Director

Dear Sirs/Mesdames:

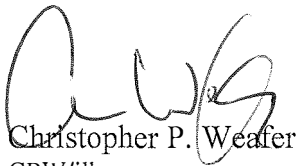
Re: British Columbia Hydro and Power Authority ("BC Hydro") 2015 Rate Design Application, Project No. 3698781

We are counsel for the Commercial Energy Consumers Association of British Columbia ("CEC"). Attached please find the CEC's Responses to British Columbia Old Age Pensioners' Organization, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre's Information Requests #1 on the CEC's Evidence with respect to the above-noted matter.

Should you have any questions regarding the foregoing, please do not hesitate to contact the writer.

Yours truly,

OWEN BIRD LAW CORPORATION



Christopher P. Weafer

CPW/jlb

cc: CEC

cc: BC Hydro

cc: Registered Interveners

**COMMERCIAL ENERGY CONSUMERS ASSOCIATION
OF BRITISH COLUMBIA (CEC)**

**CEC RESPONSE TO BRITISH COLUMBIA OLD AGE
PENSIONERS' ORGANIZATION, DISABILITY
ALLIANCE BC, COUNCIL OF SENIOR CITIZENS'
ORGANIZATIONS OF BC, AND THE TENANT
RESOURCE AND ADVISORY CENTRE (BCOAPO)
INFORMATION REQUEST #1 DATED MAY 30, 2016**

**British Columbia Hydro and Power
Authority 2015 Rate Design Application
Project No. 3698781**

June 22, 2016

**CEC RESPONSE TO BCOAPO INFORMATION
REQUEST #1 DATED MAY 30, 2016**

**British Columbia Hydro and Power Authority 2015 Rate Design Application
Project No. 3698781**

Contents

1.0	Reference: CEC Evidence, Page 7 (Lines 79-90); Page 8 (Lines 111-125); Page 9 (Lines 150-152) and Page 36 (Lines 788-791)	3
2.0	Reference: CEC Evidence, Page 6 (Lines 73-74); Page 10 (Lines 174-176).....	5
3.0	Reference: CEC Evidence, Pages 11-12	6
4.0	Reference: CEC Evidence, Page 13	7
5.0	Reference: CEC Evidence, Page 15, (Lines 297-299 and 311-313)	8
6.0	Reference: CEC Evidence, Page 20 (Lines 386-393) and Page 32 (Lines 716- 721)	9
7.0	Reference: CEC Evidence, Page 21 (Lines 415-434)	10
8.0	Reference: CEC Evidence, Pages 24 and 26, BCUC 1.12.1	11
9.0	Reference: CEC Evidence, Pages 24-28	12

1.0 Reference: CEC Evidence, Page 7 (Lines 79-90); Page 8 (Lines 111-125); Page 9 (Lines 150-152) and Page 36 (Lines 788-791)

Preamble: At page 7 the evidence states: "To the extent that customer load that may otherwise be on the peak could be moved off the coincident electric system peak this would enable BC Hydro to defer adding capacity in the future to the serve such load at the peak".

At page 8 the evidence also states: "Staying off the BC Hydro peak could involve approximately 5 days of interruption typically no more than twice per year to offset the first increment of about 750 MW of peak".

At page 9 the evidence states: "Incremental additions to the transmission system can be avoided, if the demand is kept off the coincident electric system peak".

At page 36 the evidence states: "BC Hydro is planning for additional capacity to be added to the hydroelectric system, which would involve the addition of the 6th unit at the Revelstoke Generating Station. This capacity is anticipated to cost approximately \$50/kW -year or \$50,000/MW -year. The Revelstoke GS capacity may be required for contingency planning as early as 2021 or 2031 in the base plan."

1.0 Does CEC accept that there could be regional transmission supply issues that occur at times other than the "system peak" and during which transmission loads would have to be reduced in order to defer adding capacity in the future?

Response:

The CEC accepts that there could be regional transmission supply issues and other system issues which may affect the ability of BC Hydro to provide supply. The CEC believes that avoiding system peak is a planning issue which assumes base existing supply capability. The CEC notes that BC Hydro has contingency plans and N-1 planning to handle emergent contingencies.

1.2 If not, why not?

Response:

This is not a factor because BC Hydro has system resources and contingencies for managing supply issues.

1.3 If yes, how would this change the proposed rate structure terms as set out at pages 24-28?

Response:

To the extent there may be any effect on the rate design it would be handled with the criteria definition for interruption.

1.4 Please confirm that additional generating capacity is not expected to be required until 2021. If so, should the referenced \$50/kW cost be “discounted” if it is to represent the value of capacity in 2017?

Response:

Yes, it is relevant to discount the future stream of capacity additions.

2.0 Reference: CEC Evidence, Page 6 (Lines 73-74); Page 10 (Lines 174-176)

Preamble: At page 6 the evidence states: “Similarly there is an economic case for providing customers with a credit for when they are able to reduce load to reduce BC Hydro's capacity requirements”.

At page 10 the evidence states: “The consequence for BC Hydro of providing a non-firm interruptible rate would be to remove these loads from its firm service load forecasting and avoid the costs of acquiring generation capacity and transmission resources to meet these loads”.

2.1 Please demonstrate that there is an economic case to support the proposed demand charge reductions set out at pages 24 and 26 based on BC Hydro’s current avoided costs.

Response:

Please refer to BCUC 1.2.3

3.0 Reference: CEC Evidence, Pages 11-12

1.1 Are BC's greenhouses located/concentrated in particular areas of the province and, if so, where?

Response

Yes, they are primarily located in the Lower Mainland-Vancouver Island region.

4.0 Reference: CEC Evidence, Page 13

Preamble: The evidence states: “The potential for growers to enhance production through increased lighting is particularly relevant because it potentially represents offsetting revenue for BC Hydro to replace the revenue reduction in demand charges with additional energy sale”.

4.1 Please contrast BC Hydro’s proposed MGS and LGS energy rates with BC Hydro’s avoided energy costs.

Response:

Rates	Value of Energy- Market	Avoided Cost of Energy- LRMC
MGS 8.83 cents/kWh	3.5 cents/kWh	8.5 cents/kWh to 10 cents/kWh
LGS 5.56 cents/kWh	3.5 cents/kWh	8.5 cents/kWh to 10 cents/kWh

4.2 Will increased greenhouse energy sales lead to additional “net revenues” for BC Hydro (i.e., will the additional revenue less the incremental cost of providing the associated energy be positive?)

Response:

Yes. For a considerable period of time BC Hydro is expected to have surplus energy which would have a value of energy equivalent to market-priced energy. To the extent that additional revenue comes from additional energy sales when BC Hydro has not planned for and has surplus energy then the incremental cost of energy would be the Long Run Marginal Cost (LRMC). No customer additions or incremental uses of energy are evaluated from a customer and rate perspective at LRMC so it would not be appropriate to use this value. This follows the postage stamp and embedded cost principles for BC Hydro ratemaking.

4.3 If the response to part (2) is no, what adjustments would be required to the proposed interruptible rate structure to address this shortfall?

Response:

The CEC is not proposing to evaluate a customer rate based on incremental cost caused by productive use of energy, because it applies the postage stamp and embedded cost principles for BC Hydro ratemaking.

5.0 Reference: CEC Evidence, Page 15, (Lines 297-299 and 311-313)

Preamble: At page 15 the evidence states: "The pumping is required whenever the volumes are sufficient to overwhelm the natural runoff capabilities of the water flows, which happens when the Fraser levels reach certain critical levels". "The evidence shows that the flood pumping requirements can fall very near to or on the BC Hydro peak demand because the rainfall in this case, November 30th, preceded the cold snap."

5.1 The evidence appears to suggest that the requirement for flood pumping agencies to operate depends on rainfalls and snow melts such that the agencies have little control over when they must operate. Please confirm whether or not this is the case and, if not, please clarify.

Response:

This is generally the case but they do have sufficient flexibility to stay off the BC Hydro peak and would make the decision to participate in the rate based on this ability in order to avoid penalties for violation of the terms of the tariff requiring no use of energy on the defined peak.

5.2 If the response to part (1) is affirmative, please explain how flood pumping agencies could ensure that their operations are not coincident with BC Hydro's peak demand.

Response:

See BCOAPO 1.5.1 above.

6.0 Reference: CEC Evidence, Page 20 (Lines 386-393) and Page 32 (Lines 716- 721)

6.1 Please confirm that the supply of power under the Shore Power rate can be terminated in circumstances where BC Hydro does not have sufficient energy or capacity.

6.1.1 Would similar terms be appropriate for interruptible LGS and MGS customers? If not, why not?

Response:

No. The Shore Power rate has no demand charge and therefore is established conditional on BC Hydro having sufficient capacity and energy. The Shore Power rate is not aimed at reducing future capacity investment but aims instead to make use of spare capacity and therefore not cause new capacity. Capacity could be utilized at the peak if capacity is available. The CEC proposal aims to permanently reduce capacity requirements by shifting load off the peak.

6.1.2 Would a comparable supply condition that focused just on the availability of capacity be appropriate?

Response:

No. The purpose of the non-firm capacity interruptible service is to permanently reduce peak capacity requirements and therefore defer future costs of capacity additions. By definition customers on the CEC proposed rate would receive supply only when BC Hydro has capacity available.

7.0 Reference: CEC Evidence, Page 21 (Lines 415-434)

7.1 Which of the options set out on page 21 most closely matches the frequency at which customers under the proposed MGS and LGS interruptible rates would be interrupted?

Response:

The CEC does not propose that the terms for interruption be defined in terms of frequency and duration of interruptions. The CEC proposes to define interruption based on avoiding a defined measure of a reduction of the BC Hydro peak requirements versus its designed capacity to meet peak requirements.

7.2 Please explain why the proposed MGS and LGS interruptible rate structures do not specify the allowed periods of interruption. Wouldn't such an approach provide greater clarity to both BC Hydro (in terms of when it can interrupt) and the customers (in terms of when they will be interrupted)?

Yes. There should be a definition of interruption and the CEC has proposed one in BC Hydro 1.12.1.

8.0 Reference: CEC Evidence, Pages 24 and 26, BCUC 1.12.1

8.1 Why is there such a material difference in the proposed discount to be provided to MGS versus LGS customers for what is effectively the same benefit to the system?

Response:

The CEC has revised its proposed discounts to be 61% for both LGS and MGS customers. Please see BCH 1.8.1. The discounts proposed are the same on a percentage basis but materially different in absolute terms. This is because the CEC discounted the existing demand charges and the MGS demand costs are largely collected through energy charges.

9.0 Reference: CEC Evidence, Pages 24-28

9.1 With respect to the metering provisions, would separate metering of firm and non-firm load be required during the pilot? If so, who would pay for it if such metering was not already in place? If not, why not?

Response:

Yes. Separate metering could be required if cost effective for the purposes of the pilot. If metering is cost effective, the CEC has assumed that participating customers could pay for such metering. Conversely, as metering is provided by BC Hydro for customers taking service under a rate it may be appropriate for BC Hydro to pay for the metering.

9.2 It is noted that there is a proposed \$150/month administration charge to handle the cost of registering and qualifying customers. Will there be an additional charge to cover incremental billing/account maintenance costs (per lines 540-542 and 616-618)?

Response:

The CEC adopted the \$150/ month administration charge from the Shore Power rate, and assumes that it would cover administrative costs beyond registering and qualifying customers.

9.3 The terms for LGS customers (lines 545-547) limits interruptions to “avoiding the electric system coincident peak”. However, terms for MGS customers (lines 620-632) have no similar restriction. Please explain.

Response:

This was an oversight and both terms should limit interruptions to avoiding the electric system coincident peak.

9.4 Please confirm whether BC Hydro would be able to interrupt LGS customers (and MGS customers) to address regional transmission supply constraints.

Response:

Not confirmed. The CEC’s proposed interruptible rate is aimed at avoiding the cost of future supply additions and not at providing responses to emergent supply constraints. Curtailment program incentives which the CEC proposes be examined for general service customers in Module 2, similar to the TSR load curtailment program, could be used as a response to

transmission supply constraints. Generally, BC Hydro plans its system and its contingencies to be able to meet emergent supply constraints.