

June 22, 2016

**VIA EMAIL**

Laurel Ross  
Acting Commission Secretary  
BC Utilities Commission  
6th Floor 900 Howe Street  
Vancouver, BC V6Z 2N3



Reply to: Sarah Khan  
skhan@bcpiac.com  
Ph: 604-687-4134

Our file: 7615

Dear Ms. Ross:

**Re: BC Hydro 2015 Rate Design Application Module 1  
Information Request Responses of BCOAPO *et al.***

We write to file responses to the following parties' Information Requests to BCOAPO in the above noted proceeding:

1. British Columbia Utilities Commission (BCUC)
2. BC Hydro and Power Authority (BC Hydro)
3. BC Sustainable Energy Association and Sierra Club of BC (BCSEA)
4. Commercial Energy Consumers Association of British Columbia (CEC)
5. **Movement of United Professionals (MoveUp)**
6. Zone II Ratepayers Group (Zone II)

Please note that some of our responses contain links to various documents. We have indicated when links are replicated elsewhere in the responses.

Please let us know if you have any questions.

Sincerely,

**BC Public Interest Advocacy Centre**

Sarah Khan & Erin Pritchard  
Barristers and Solicitors

- c. Tom Loski, Chief Regulatory Officer, BC Hydro  
Registered participants

Encl.

**British Columbia Old Age Pensioners Organization *et al.*  
Responses to Movement of United Professionals (MoveUP),  
(otherwise known as COPE 378)  
Information Request No. 1 on BCOAPO Evidence**

**June 22, 2016**

**British Columbia Hydro and Power Authority  
2015 Rate Design Application  
Project No. 6398781**

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- 1.0 Reference: Part 1. An Essential Services Usage Block in the Residential Inclining Block Rate.**  
**A. The Need for an Essential Services Usage Block**  
**Exhibit C2-12, Direct Testimony of Roger Colton, page 7**

Residential Customers		Low-Income Customers	
Single-Family Detached	Apartment	Single-Family Detached	Apartment
894,994	459,333	55,325	78,442

- 1.1 While the evidence notes a link between income and usage and a high percentage of low income ratepayers living in apartments, there are still a significant number of low income ratepayers living in single family dwellings, a dwelling type typically associated with much higher usage.

Is Mr. Colton concerned that his proposal does not equitably treat low income ratepayers in single family dwellings versus those who live in apartments?

**RESPONSE**

There is always a concern about whether all ratepayers are “equitably treated” under any rate design. Such concerns are not unique to the Essential Services Usage Block. Mr. Colton, however, does not believe that low income ratepayers in single family dwellings are unduly burdened by the proposed Essential Services Usage Block.

- 1.1.1 If no, please explain why not.

**RESPONSE**

All low income customers are eligible to take service pursuant to the Essential Services Usage Block. Moreover, the difference in bill impact by usage deciles was presented in

Mr. Colton's Direct Testimony on page 26 (Exhibit C2-12, PDF page 31/341). That difference is minimal.

- 1.1.2 If yes, please explain why no provision is included within this proposal to address this inequity.

## RESPONSE

Please see BCOAPO's response to MoveUp IR 1.1.

### 2.0 Reference: B. Establishing the Essential Services Usage Block.

#### Exhibit C2-12, Direct Testimony of Roger Colton, page 13

*"I propose that a limited low-use Essential Services block of electricity be available to income-qualified customers. The Essential Services usage block should be available to customers confirmed as having income at or below 100% of the Pre-Tax Low-Income Cutoff (LICO-PT). I recommend that BC Hydro not engage in its own income qualification for the Essential Services usage block. Instead, BC Hydro should accept the income qualifications of designated federal and provincial social assistance programs. BC Hydro need not know the precise income of the customer; instead, income qualification is a yes/no toggle. The relevant third party need only confirm that a customer is (or is not) income qualified under the LICO-PT decision-rule"*

- 2.1 Does Mr. Colton agree with the use of the LICO-PT as a sufficient measure of "low income" in Canada?

## RESPONSE

The LICO-PT is not a sufficient measure of "low income" in Canada. BCOAPO is using the LICO-PT to measure poverty as this is the measure that was used by BC Hydro in its Residential End Use Survey. Mr. Colton considered proposing LICO-PT plus 30% as the measure of low income for the purposes of the energy assistance proposals, as this is the measure used by the provincial government to define "low income" in the Demand Side Measures Regulation B.C. Reg. 141/2014. However, Mr. Colton decided against using LICO-PT plus 30% due to concerns that adding 30% would increase the number of ratepayers eligible for the proposed energy assistance programs to a level that would impose unreasonable burdens on nonparticipating customers. For further discussion of the limitations of LICO-PT as a measure of "low income" in Canada, please see Direct Testimony of Seth Klein, pages 8-11 (Exhibit C2-12, PDF pages 262-265/341) (note: what Mr. Colton refers to as LICO-PT is referred to as "LICO-Before Tax" or "LICO-BT" in Mr. Klein's testimony). Please also see BCOAPO's response to BCUC IR 24.1, and Exhibit B-14, BC Hydro response to BCOAPO IR 1.106.1 REVISED Attachment 2.

- 2.2 What, if any, other qualification benchmarks is Mr. Colton aware of that have been successfully used to trigger the availability of income-linked energy cost relief programs in other jurisdictions?

## RESPONSE

The two “qualification benchmarks” most commonly used for income-linked energy cost relief programs involve: (1) a multiplier of income (e.g., 100% of LICO-PT, 150% of Federal Poverty Level; 50% of median income); and (2) a combination of a multiplier of income and an energy burden (e.g., 150% of Federal Poverty Level and an energy burden equal to or exceeding x% of income). These two qualification benchmarks are not the only ones in use, however. See Roger Colton, *Measuring Energy Needs of the Poor: An Introduction*, online: Fisher, Sheehan & Colton Public Finance & General Economics <http://www.fsconline.com/downloads/Papers/1993%2010%20LI-NEEDS.pdf>.

- 2.3 Is Mr. Colton familiar with the term “energy poverty”?

## RESPONSE

Yes.

- 2.3.1 If so, please put on the record his understanding of what constitutes energy poverty?

## RESPONSE

There is no single definition of “energy poverty.” Different stakeholders use the term to refer to different circumstances. When Mr. Colton uses the term “energy poverty,” he refers to customers’ ability to pay their utility bills (and thereby meet the utility’s financial needs) without undue hardship. BCOAPO notes that Mr. Colton did not use the term “energy poverty” in his Direct Testimony.

- 2.3.2 Does Mr. Colton have in his possession or knowledge of any evidence that ratepayers with incomes just below LICO-PT suffer a disproportionate degree of energy poverty when compared to those with incomes just above LICO-PT?

## RESPONSE

No.

- 2.3.3 Does Mr. Colton think it is reasonable that ratepayers with incomes just below LICO-PT receive the full benefit of the proposed Essential Services block rate while those with incomes marginally above LICO-PT receive none?

## RESPONSE

Yes. Whenever any line demarcating eligibility is drawn for any program, there will be someone who is just above the line (and thus not eligible) who can be compared to someone just below the line (and thus eligible). Such an impact is inherent in the nature of line-drawing

- 2.4 Please confirm that the LICO-PT figure used for this proposal is a Pan-Canadian figure, i.e. not specific to British Columbia.

## RESPONSE

Confirmed. For a description of the calculation of LICO-PT, see Income Statistics Division, *Income Research Paper Series: Low Income Lines, 2010 to 2011*, online: Statistics Canada <http://www.statcan.gc.ca/pub/75f0002m/75f0002m2012002-eng.pdf>.

- 2.4.1 Please confirm that the LICO-PT figure used for this proposal results in an income far lower than what is currently considered a living wage in British Columbia.

## RESPONSE

Confirmed. The difference between LICO-PT and the income currently considered to be a living wage in British Columbia was discussed in the Direct Testimony of Seth Klein at pages. 8-11 & 28-30 (Exhibit C2-12, PDF pages 262-265/341 & pages 282-284/341)). See also BCOAPO response to MoveUp IR 2.1.

Current LICO-Before Tax thresholds are difficult to locate. However, BC Hydro's website sets out the current thresholds for LICO plus 30% (the financial threshold for ratepayers to qualify for BC Hydro's Energy Conservation Assistance Program), as follows:

### Income qualification

To qualify, you must meet the income requirements below. Total household income includes the combined income of all members in the household over the age of 18.

NUMBER OF PEOPLE IN HOUSEHOLD	TOTAL HOUSEHOLD INCOME
1	\$32,000
2	\$39,800
3	\$48,900
4	\$59,400

5	\$67,400
6	\$76,000
7 (or more people)	\$84,600

This table is taken from BC Hydro's website at:

<http://www.bchydro.com/powersmart/residential/savings-and-rebates/savings-based-on-income.html>.

- 2.5 Does BCOAPO's proposal contemplate a regular requalification: i.e. periodic confirmation that the ratepayer receiving the Services block of electricity continues to receive an income at or below LICO-PT?

**RESPONSE**

Yes.

- 2.5.1 If not, why not?

**RESPONSE**

Please see BCOAPO's response to MoveUp IR 2.5.

- 2.5.2 If so, please describe the requalification requirement proposed.

**RESPONSE**

No specific requalification requirement was contained in Mr. Colton's Direct Testimony. However, Mr. Colton has historically proposed an annual income reverification with certain exceptions. On the one hand, households with zero dollar (\$0) incomes are required to have their income "re-verified" more frequently than annually, since it is unreasonable to believe that households can live with \$0 incomes over the long-term. On the other hand, households with incomes that reasonably can be expected to vary little year-over-year (e.g. Ministry of Social Development and Social Innovation disability benefits, Canada Pension Plan disability benefits) have an income re-verification on a biennial basis. The nature and frequency of income re-verification depends on the purposes to be served by the income re-verification. When the precise level of income is needed to determine the level of benefit (e.g., a percentage of income program), income re-verification may need to be more frequent. When an income-toggle is used, income re-verification may be less frequent.

One option for income re-verification would be to use the eligibility periods that are used for the Ontario Electricity Support Program and Low Income Energy Assistance

Program as set out at page 12 of the Ontario Energy Board's OESP and LEAP Policy Manual effective October, 2015, as follows:

Renewal: OESP recipients must renew their application every two years, with the exception of recipients over 65 years old or who receive a CPP disability pension, who will only have to renew their applications every five years.

Electricity service providers must provide at least 60 days' notice to OESP recipients when they must renew their application.

This Manual can be found online at:

[http://www.ontarioenergyboard.ca/oeb/Documents/Documents/OESP\\_LEAP\\_Program\\_Manual.pdf](http://www.ontarioenergyboard.ca/oeb/Documents/Documents/OESP_LEAP_Program_Manual.pdf) (note that this Manual is also referenced in BCOAPO's response to BCUC IR 11.2).

- 2.6 Does Mr. Colton's proposal exclude persons who do not receive federal /or provincial social assistance but who nevertheless fall under the LICO-PT limits (i.e. people colloquially referred to as "the working poor" or people receiving small pensions, annuities, trust fund proceeds, or similar income sources)?

## **RESPONSE**

The treatment of persons who do not receive federal /or provincial social assistance, but who nevertheless fall under the LICO-PT limits was discussed in Mr. Colton's Direct Testimony at pages 28-31 (Exhibit C2-12, PDF pages 33-36/341). Please also see BCOAPO's response to MoveUp IR 2.1.

- 2.6.1 If yes, please explain why this segment of the population is excluded from the BCOAPO Essential Services Usage proposal.

## **RESPONSE**

Please see BCOAPO's response to MoveUp IRs 2.1 and 2.6.

- 2.6.2 If not, please explain what BCOAPO proposes should be an appropriate confirmation of income for employed or pensioned applicants to qualify for the proposed program.

## **RESPONSE**

Please see BCOAPO's response to MoveUp IR 2.6.

Another option for an appropriate confirmation of income for employed or pensioned applicants would be to use a similar confirmation process that BC Hydro uses in determining eligibility for its Energy Conservation Assistance Program (adjusted for LICO-PT rather than LICO plus 30%).

**3.0 Reference: Exhibit C2-12, Direct Testimony of Roger Colton, page 19**

*“I proposed an Essential Services usage block discount of four cents per kilowatt-hour (\$0.04/kWh). A four cent discount provides meaningful assistance to low-income customers without imposing unreasonable burdens on residential customers not taking service under the Essential Services usage block. Depending on consumption, as disaggregated based on the housing type, heating fuel and location factors I have previously discussed, the proposed discount would provide a bill reduction of between \$9 and \$16 per month on low-use, low-income bills.”*

- 3.1 Please provide a survey of the typical bill reductions provided by income-linked energy cost relief programs in other jurisdictions including those in the United States.

**RESPONSE**

The most comprehensive review of income-linked energy cost relief programs was undertaken in the “Multi-State Study” of ratepayer-funded energy assistance programs in the United States. For the full report of the study, see APPRISE and Fisher, Sheehan, and Colton, *Ratepayer-Funded Low-Income Energy Programs: Performance and Possibilities*, online: Operation Fuel, Inc. <http://www.operationfuel.org/wp-content/uploads/13StateAPPRISEStudy.pdf>. The state-specific appendices of this report can be found at the following links:

California: [http://www.appriseinc.org/reports/MSS\\_CA.pdf](http://www.appriseinc.org/reports/MSS_CA.pdf)

Colorado: [http://www.appriseinc.org/reports/MSS\\_CO.pdf](http://www.appriseinc.org/reports/MSS_CO.pdf)

Indiana: [http://www.appriseinc.org/reports/MSS\\_IN.pdf](http://www.appriseinc.org/reports/MSS_IN.pdf)

Maryland: [http://www.appriseinc.org/reports/MSS\\_MD.pdf](http://www.appriseinc.org/reports/MSS_MD.pdf)

Maine: [http://www.appriseinc.org/reports/MSS\\_ME.pdf](http://www.appriseinc.org/reports/MSS_ME.pdf)

Missouri: [http://www.appriseinc.org/reports/MSS\\_MO.pdf](http://www.appriseinc.org/reports/MSS_MO.pdf)

New Jersey: [http://www.appriseinc.org/reports/MSS\\_NJ.pdf](http://www.appriseinc.org/reports/MSS_NJ.pdf)

Nevada: [http://www.appriseinc.org/reports/MSS\\_NV.pdf](http://www.appriseinc.org/reports/MSS_NV.pdf)

Ohio: [http://www.appriseinc.org/reports/MSS\\_OH.pdf](http://www.appriseinc.org/reports/MSS_OH.pdf)

Oregon: [http://www.appriseinc.org/reports/MSS\\_OR.pdf](http://www.appriseinc.org/reports/MSS_OR.pdf)

Pennsylvania: [http://www.appriseinc.org/reports/MSS\\_PA.pdf](http://www.appriseinc.org/reports/MSS_PA.pdf)

Washington: [http://www.appriseinc.org/reports/MSS\\_WA.pdf](http://www.appriseinc.org/reports/MSS_WA.pdf)

Wisconsin: [http://www.appriseinc.org/reports/MSS\\_WI.pdf](http://www.appriseinc.org/reports/MSS_WI.pdf)



- 3.2 Does Mr. Colton agree that eliminating the fixed Basic Charge has the least impact on incentives to and benefits from minimizing electricity consumption?

## RESPONSE

Not necessarily.

- 3.2.1 If so, does Mr. Colton agree that this would be a positive first step in a program designed to provide rate relief?

## RESPONSE

No.

- 3.2.2 If not, please explain.

## RESPONSE

Utility rates are not an effective mechanism by which to send “price signals” to low income customers. Mr. Colton discusses the role of price signals to low income customers in detail in the following:

Roger Colton, *Home Energy Affordability in Manitoba: A Low-Income Affordability Program for Manitoba Hydro*, online: Green Action Centre <http://greenactioncentre.ca/wp-content/uploads/2011/01/Home-Energy-Affordability-in-Manitoba-A-Low-Income-Affordability-Program-for-Manitoba-Hydro.pdf> . (also cited in BCOAPO’s response to BCUC IR 17.1.)

Roger Colton, “Client Consumption Patterns within an Income-Based Energy Assistance Program” (1990) 24:4 *Journal of Economic Issues* 1079. (Available at [http://bcpiac.com/wp-content/uploads/2016/06/Colton\\_1990\\_EAP\\_Usage\\_Patterns.pdf](http://bcpiac.com/wp-content/uploads/2016/06/Colton_1990_EAP_Usage_Patterns.pdf)). (Also cited in BCOAPO’s response to BCUC IR 19.2.)

Mr. Colton further discusses the role of price signals to low income customers in

Roger Colton, *Water Bill Affordability for the City of Philadelphia*, online: City of Philadelphia <http://www.phila.gov/water/rateboard/PDF/CityInformationRequestsSet%20I.pdf>. (Also cited in BCOAPO’s response to BCUC IR 12.2.)

## 4.0 Reference: Part 2. Establishing a Crisis Fund

### Exhibit C2-12, Direct Testimony of Roger Colton, page 36, Footnote 22

*“I intentionally do not prescribe the income-eligibility for a crisis intervention fund in this testimony. Historically, crisis intervention*

*funds have maximum income eligibility guidelines that exceed low-income DSM programs or programs such as my proposed Essential Services usage block. The precise definition of income eligibility for this crisis intervention program is not essential to determine for purposes of establishing funding. Setting the income eligibility level should be done through a consultation with BC Hydro, the third party administrator, and other interested stakeholders.”*

- 4.1 Please indicate which jurisdictions were used to inform the above noted footnote, specifically, those where maximum eligibility guidelines for crisis intervention funding exceed low-income DSM programs or other income-linked energy cost relief programs.

## **RESPONSE**

Jurisdictions that Mr. Colton had in mind in making the above-quoted statement include those in which he has worked; namely: Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Maryland, Pennsylvania, Ohio, Michigan, Indiana, Illinois, Minnesota, Missouri, Colorado, Arizona, New Mexico, California, Oregon and Washington. This is not to say that other jurisdictions do not also support the proposition Mr. Colton advances.

### **5.0 Reference: Part 3. Low-Income DSM and BC Hydro’s Rate Design Application**

#### **Exhibit C2-12, Direct Testimony of Roger Colton, page 45**

*“In the Honorable Minister of Energy and Mines Bill Bennett’s July 6, 2015 letter to the BC Utilities Commission, the Minister specifically requested that the Commission provide information on several issues, including “within the current regulatory environment, what options are there for additional Demand Side Management programs, including low income programs?” While BC Hydro has asserted that such information needs to be provided only if and to the extent that low-income customers had significant (over 10 percent) bill impacts as a result of this proceeding (BCOAPO 1.102.1), there is no language in the Minister’s letter that imposes such a limitation.”*

- 5.1 Does Mr. Colton agree that the impacts of rate increases are regressive, i.e. that they hit low income ratepayers harder than middle or high income ratepayers facing the same rate increases?

## **RESPONSE**

Yes.

5.1.1 If so, did that factor into Mr. Colton's position on DSM in this proposal? How?

**RESPONSE**

No.

5.1.2 If not, why not?

**RESPONSE**

The regressive impact of rate increases was not a relevant factor to Mr. Colton's analysis. As Mr. Colton explained in his Direct Testimony, his proposal on low income DSM was based on the observations that: (1) without external assistance, low income households are denied the ability to respond to changes in bills associated with rate design and/or revenue requirement changes; (2) BC Hydro significantly under-serves its low income population with DSM; (3) BC Hydro has failed to undertake reasonable efforts recommended by its own evaluator to facilitate expanding its low income DSM programming; and (4) low income DSM can improve payment patterns and reduce levels of inability-to-pay (see Direct Testimony of Roger Colton, pages. 44-61 (Exhibit C2-12, PDF pages 49-66/341)). Mr. Colton concluded that BC Hydro is under-performing on providing DSM services to its low income population; that BC Hydro has failed to undertake those reasonable efforts that would allow the Company to improve its performance; that by under-performing with low income DSM in particular, the Company is failing to use all reasonable and available resources to help low income customers respond to the increased bills those low income customers will face over time; and that, in the absence of reasonable BC Hydro expenditures on low income DSM, low income customers are effectively shut out of the market for responding to increased rates (see Direct Testimony of Roger Colton, page 60 (Exhibit C2-12, PDF page 65/341)). Whether or not the impacts of rate increases are "regressive" does not relate to these conclusions.

**6.0 Reference: Part 4. Terms and Conditions (including Low Income Terms and Conditions)**

**A. Cost Effectiveness as the Appropriate Business Case Analysis**

**Exhibit C2-12, Direct Testimony of Roger Colton, page 64**

*"Cost-effectiveness analysis is used to evaluate options for achieving a set of defined objectives. Cost-effectiveness analysis is used to ensure the efficient use of resources in instances where benefits are difficult to monetarily value; when the information required is difficult to determine; or in any other cases where an attempt to make a precise monetary measurement of benefits would be tricky or open to considerable dispute.*

*Cost-effectiveness differs from cost-benefit analysis in that cost-benefit analysis is used only to address those types of alternatives where the outcomes can be measured in monetary terms. The purpose of cost-effectiveness analysis is to assess whether an intervention provides value for money. Cost-effectiveness analysis is used to determine which of a set of alternative activities achieves the greatest outcome for the costs expended.”*

- 6.1 Is Mr. Colton aware of any proposed of income-linked energy cost relief programs in other jurisdictions that were rejected on the basis that would not be cost effective?

**RESPONSE**

No.