

William J. Andrews

Barrister & Solicitor

1958 Parkside Lane, North Vancouver, BC, Canada, V7G 1X5
Phone: 604-924-0921, Fax: 604-924-0918, Email: wjandrews@shaw.ca

March 27, 2017

British Columbia Utilities Commission
Sixth Floor, 900 Howe Street, Box 250
Vancouver, BC, V6Z 2N3
Attn: Erica Hamilton, Commission Secretary
By Web Posting

Dear Madam:

Re: BC Hydro F2017-F2019 Revenue Requirements Application,
BCUC Project No. 3698869
BC Sustainable Energy Association and Sierra Club BC responses to Information
Requests

Pursuant to the amended regulatory timetable approved by Order -20-17 [Exhibit A-22] and BCUC Rule 14, attached please find the responses of the interveners BC Sustainable Energy Association and Sierra Club BC to information requests regarding BCSEA-SCBC's evidence filed in this proceeding [Exhibit C1-8]. The following files are attached:

- 2017-03-27 BCSEA-SCBC response to BCUC A-25 re BCH RRA.pdf
- 2017-03-27 BCSEA-SCBC response to CEABC C4-7 re BCH RRA.pdf
- 2017-03-27 BCSEA-SCBC response to CEC C10-9 re BCH RRA.pdf
- 2017-03-27 BCSEA-SCBC response to NIARG C11-9 re BCH RRA.pdf

Please contact the undersigned regarding any questions about these responses to information requests.

Yours truly,

William J. Andrews



Barrister & Solicitor
Encl.

BRITISH COLUMBIA UTILITIES COMMISSION

BCUC Project No. 3698869
British Columbia Hydro and Power Authority
F2017 to F2019 Revenue Requirements Application

**British Columbia Sustainable Energy Association and Sierra Club British Columbia
Response to Non-Integrated Areas Ratepayers Group (“NIARG”)
Information Request No. 1 on Intervener Evidence
March 27, 2017**

1.0 Topic: Cost-Effective Energy Savings from DSM Programs

Reference: Exhibit C-1-8, PDF 7.

Preamble: “The DSM program investment described in the 2013 IRP would provide considerably more savings for residential and industrial customers than will the DSM Plan.”

- 1.1 In reaching the conclusion quoted above did Energy Futures Group, Inc., (EFG) include or exclude residential and industrial customers in BC Hydro’s Non-Integrated Areas also known as Zone IB and Zone II?

Response:

EFG did not consider specific customers or geographies in its statement. Rather, it relied on BC Hydro’s savings projections in both the DSM Plan and in the 2013 IRP.

- 1.2 Please describe EFG’s assumptions or conclusions regarding the viability and appropriateness of DSM programs in Zone IB or Zone II relative to DSM programs in Zone I.

Response:

As in its response to 1.1 above, EFG relied on BC Hydro’s savings projections in its statement and did not make any assumptions regarding the viability of DSM in any specific geography.

- 1.3 1.3 What differences in circumstances in Zone 1B and/or Zone II relative to Zone I does EFG understand to be likely to affect the viability and appropriateness of DSM programs?

Response:

EFG understands that a number of factors that are different in Zones IB, Zone II, and Zone I could lead to differences in the viability of DSM programs.

Some of these factors relate to geographically-specific avoided costs. However, if current policy relies on average avoided costs rather than locationally-specific avoided costs, then the avoided cost differences may be moot.

Other factors relate to the costs and availability of operating DSM programs in more remote geographies, which would be relevant if project cost-effectiveness is determined on a project-specific basis. Among the issues that could potentially be relevant are:

- **The relative higher cost of electricity generation in Zones IB and II compared with Zone I;**

- Any differences in how fixed costs and the cost of generation are reflected in rates in Zones IB and II compared with Zone I;
- The “dirtier” environmental profile of generation in Zone II (associated with diesel generation), and to a lesser degree in Zone IB, relative to Zone I;
- The relative higher cost of obtaining products and materials needed for implementing DSM measures in Zones IB and II; and
- The relative lack of contractors skilled in specific DSM measure installation in Zones IB and II.

There may be other factors as well.

- 1.4 1.4 Does EFG’s experience with Non-Integrated Areas in other utility jurisdictions give rise to any suggestions for that may be helpful to consider in applying DSM programs in BC Hydro’s Zone IB and/or Zone II? If so, please discuss.

Response:

While EFG has limited experience in Non-Integrated Areas, there are relevant policy issues with which it does have experience that may lend perspective to DSM in Non-Integrated Areas. Specifically, some jurisdictions either require or suggest that energy efficiency program administrators should make special efforts to assure that “hard-to-reach” or “underserved” customers are able to participate in DSM programs. Most frequently this applies to low-income residential customers, but it may also apply to small businesses, residents of multi-residential housing, and others who have historically not participated in typical DSM programs in high numbers. In these jurisdictions, where certain customer groups face unique barriers, Program Administrators are expected to provide DSM programs that are specifically designed to overcome those unique barriers, thereby enabling these customers to gain access to the benefits provided by DSM program participation.

It would seem plausible to consider whether customers in Non-Integrated Areas might be both “hard-to-reach” and “underserved”. If either were true, and if BC policy supports providing special consideration to the unique barriers faced by Non-Integrated customers, then it would follow that BC Hydro should make special efforts to address the unique barriers faced by these customers.

2.0 Topic: Customer Access to DSM Programs

Reference: Exhibit C-1-8, PDF 13.

Preamble: “Customers should not only have nominal access to participate in programs that they are funding through their utility bills, but should have access that is not unduly limited by constrained budgets.”

- 2.1 2.1 Does EFG believe that if DSM programs appear to have the potential to result in proportionately greater energy or capacity savings in Zone IB and/or Zone II relative to Zone I, then a proportionately higher budget for DSM programs in Zone IB and/or Zone II would be appropriate? Please discuss.

Response:

The decision whether or not to invest DSM resources in relation to the potential for energy or capacity savings in a specific geography is primarily a policy question. In general, most jurisdictions that support DSM programs do not use geographically specific program eligibility or geographically-specific avoided costs. Rather, programs are offered broadly to eligible customers and avoided costs used to determine the economic viability of the programs are averaged across the service territory. If the potential for savings is greater in specific areas, then any increase in budgets for that area may simply be a pragmatic approach on the Program Administrator's part to increase the likelihood of achieving the savings or participation targets that have been set out for them.

There are a number of places where geographic targeting of DSM initiatives is being explored. In some cases, notably California and New York, locationally specific avoided costs are being developed. It is EFG's impression that these geographically-targeted efforts are related more strongly to T&D constraints, with associated high values on capacity savings, than to the availability of proportionately greater savings.

In other words, when regulatory policies support geographically targeted DSM, the support is typically premised on the economic value provided by that targeting (i.e. the value of each MWh saved is greater than in other areas) rather than on the availability of savings. EFG would hesitate to support the idea that greater budgets for DSM programs in the non-integrated areas would be appropriate simply based on greater availability of savings, were that determined to be the case.

In other words, the decision to implement geographically targeted DSM programs is largely a question of economics for most jurisdictions.

However, as noted in 1.3, the economics in the Non-Integrated Areas are likely to be significantly different than in the Integrated Areas, and it would be consistent with the rationales used for geographically targeted DSM in other jurisdictions to give this closer examination.

3.0 Topic: Accelerate DSM Investments Consistent With Provincial Policies That Support Low-Carbon Electrification

Reference: Exhibit C-1-8, PDF 14.

- 3.1 3.1 Does EFG believe that the predominant use of diesel generation in Zone II and the back-up use of diesel generation in Zone IB merit proportionately higher DSM investments relative to those in Zone I? Please explain.

Response:

See EFG response to 2.1. If policy guidance, such as that provided in the Climate Leadership Plan, supports placing a high value on reducing the use of fossil fuel, then it would be appropriate to ensure that that value is reflected in the calculation of DSM benefits. Assigning higher economic benefits to the reduction of fossil fuel use based on environmental attributes could suggest that proportionately greater DSM investments should be made to offset the use of diesel generation in Zone II and Zone

IB.

4.0 Topic: BC Hydro's Assertion That It Can Easily Ramp Up DSM Programs

Reference: Exhibit C-1-8, PDF 17.

Preamble: "There is a wide understanding among energy efficiency implementers that achieving savings in certain types of programs requires a specialized contractor base - a pool of contractors who have the specific technical skills, sufficient staff capacity, and the willingness to invest in complying with program reporting requirements. Nascent programs frequently invest considerable efforts in recruiting and training contractors so that there is capacity in the markets to install the measures that they are promoting."

- 4.1 4.1 In EFG's judgment would developing a pool of contractors with experience working with the specific circumstances found in Zone IB and/or Zone II (e.g. logistics of obtaining equipment and materials in remote areas, typical residential construction methods and materials, etc.) be likely to enhance the likelihood of success of DSM programs in those Non-Integrated Areas? Please explain.

Response:

If "success" is defined as something akin to "the ability of DSM programs to engage the participation of eligible customers and achieve verified energy and capacity savings," then EFG strongly believes that the availability of contractors "with experience working with the specific circumstances found in Zone IB and/or Zone II" will enhance the likelihood of success of DSM programs in those Non-Integrated Areas. Indeed, Program Administrators in many jurisdiction have found that programs only succeed where they invest resources in ensuring that a viable contractor network exists. However, there are other factors to consider. For example, even contractors with the required technical skills will have a hard time succeeding in markets where they are not able to obtain sufficient amounts of work to be profitable—so any effort to develop a pool of contractors should also make sure that a sufficient market opportunity exists for them to secure the contracts that they require to stay in business. If little or no market opportunity exists outside of the DSM programs, then the programs must assure that sufficient volumes of work are provided through the programs—otherwise the contractors will not remain viable, and programs won't succeed.