

FortisBC Inc.
2016 Long Term Electric Resource Plan & Long Term Demand Side Management Plan

ICG Responses to BCSEA Information Requests (Exhibit C5-6)

1. Reference: Topic: DSM Project
Reference: Exhibit C7-4, Evidence of Elroy Switlishoff filed by Industrial Customers Group

1.1. The evidence is that “Zellstoff Celgar’s mill load in 2015 was 362.6 GW.h, of which 16.7 GW.h was supplied by FortisBC.” Please confirm that on a simple pro rata basis, FortisBC supplied only 4.6% of the Zellstoff Celgar mill load in 2015.

RESPONSE: Confirmed.

1.2. Please confirm, or otherwise explain, that the power FBC provides to Zellstoff Celgar is an intermittent energy source for the overall operation and is not tied to specific loads?

RESPONSE: The energy provided by FortisBC is not tied to specific loads.

1.2.1. In other words, can the 4.6% of total consumption provided by FBC be attributed to specific mill processes?

RESPONSE: No.

1.2.2. Can the 4.6% of total consumption provided by FBC be attributed to the #1 PM couch pit load that would be reduced by the Project?

RESPONSE: No.

1.3. Please confirm, or otherwise explain, that the proportion of total consumption provided by FBC is not constant throughout the year (e.g., at 4.6% in 2015). Is Zellstoff Celgar saying that the DSM project would change the load profile of power supplied by FBC?

RESPONSE: The energy provided by FortisBC is not constant throughout the year. The DSM project would be expected to reduce the amount of energy supplied by FortisBC.

1.4. The evidence is that the Project would save 229 MWh per year. Please confirm that the Project would save 10.5 MWh/y (229 MWh/y x 4.6%) of power supplied by FortisBC, calculated on a 2015 simple pro rata basis.

RESPONSE: The pro-rata calculation is correct, but it cannot be confirmed that the DSM project would reduce by 10.5 MWh per year the amount of energy supplied by FortisBC (based on an estimated project energy savings of 229 MWh per year, which has since been revised). An analysis would need to be performed to determine the coincidence of #1 couch pit pump

operation with FortisBC energy purchases in order to estimate the annual reduction in energy supplied by FortisBC.

- 1.5. Is Zellstoff Celgar saying that BC Hydro would provide an incentive of \$88,211 to an industrial customer for a DSM project that would reduce the amount of power supplied by BC Hydro by 10.5 MWh/y? If not, what is the relevance of the BC Hydro example?

RESPONSE: Please refer to the response to BCOAPO IR 2.2 to ICG.

- 1.6. The evidence notes that the FortisBC Technology Implementation offer is available to natural gas customers but not to electricity customers. Is Zellstoff Celgar saying that the Technology Implementation offer for natural gas customers would provide an incentive for an ECM project based on 100% of the project's energy savings where only 4.6% of the energy savings would come from natural gas supplied by FortisBC?

RESPONSE: The FortisBC Industrial Optimization Program Participant Guide¹ places the following restrictions on eligibility:

"The program is available to facilities with the following characteristics:

- receive natural gas or piped propane service from FortisBC and consume a minimum of 10,000 GJ of natural gas annually and/or receive electricity from FortisBC Inc. on Rate Schedules 30, 31, 32 or 33 or from the municipalities of Summerland, Penticton, Grand Forks or Nelson Hydro and consume a minimum of three GWh of electricity annually

In addition:

- the proposed building or facility must be owned by the participant or leased by the participant under a long-term lease
- the facility must use natural gas and/or electricity for industrial processes"

There does not appear to be any restriction on incentives associated with the amount of the reduction of natural gas supplied by FortisBC.

- 1.7. The evidence is that the Project's "estimated energy savings of 229 MW.h/year would yield a potential rebate of \$34,350 (valued at 15 cents per kilowatt-hour of annual electrical savings)" under the FortisBC electric DSM program. Please confirm that a potential rebate of \$34,350 for a Project that would save 10.5 MWh/y of power supplied by FortisBC would amount to \$3.27 per kilowatt-hour of annual electricity savings supplied by FortisBC?

RESPONSE: The calculation as provided is correct, however, the reduction in FortisBC-supplied energy is not confirmed, nor is the premise that the correct way to value this DSM project is solely by the reduction in energy supplied by FortisBC.

- 1.8. Has Zellstoff Celgar been told by FortisBC that an incentive would be provided at 15 cents per kilowatt-hour annual savings for savings of electricity not provided by FortisBC?

¹ https://www.fortisbc.com/Rebates/RebatesOffers/Documents/16-177.3_Industrial_Opt_ParticipantGuide_Web.pdf

RESPONSE: Yes.

1.8.1.If so, please provide the reference.

RESPONSE: During the review of the 2012 DSM Plan, FortisBC advised for the first time in response to information requests that Celgar was not eligible for DSM programs. At the Oral Hearing, under cross-examination, FortisBC then said that Celgar was eligible for DSM programs, contrary to the express statements made by FBC in response to information requests. The transcript of that exchange with Mr. Mark Warren, Director of Customer Service of FortisBC, follows:

MR. HOBBS: Q: Are you willing, as things stand today, to provide incentives to Zellstoff Celgar?

MR. WARREN: A: Yes, we are.

MR. HOBBS: Q: Is that contrary to some of the answers that you've provided in response to information requests in the filing?

MR. WARREN: A: Yeah (T5:803, lines 11-17)

Mr. Warren then went on to explain why Celgar's eligibility for DSM programs had been suspended, and that the explanation related to Order G-56-10. Celgar did not challenge Mr. Warren's explanation, given the surprising and unequivocal change in position by FortisBC during the Oral Hearing. However, it was noteworthy that it was not until FortisBC was faced with cross-examination before the Commission that FortisBC changed its position.

1.8.2.If not, why should FortisBC, and hence its ratepayers, pay an incentive for a reduction of electricity not supplied by FortisBC?

RESPONSE: An analysis of the definition of a demand-side measure and the legislative scheme should begin with Section 1(1) of the *Clean Energy Act* that provides the following definition:

"demand-side measure" means a rate, measure, action or program under-taken

- (a) to conserve energy or promote energy efficiency,
- (b) to reduce the energy demand a public utility must serve, or
- (c) to shift the use of energy to periods of lower demand, ... (emphasis added)

By this definition, a demand-side measure can be either a measure to conserve energy or promote energy efficiency or a measure to reduce the energy demand a public utility must serve. That is, the legislature expressly rejected the view of FortisBC that a demand-side measure must always reduce the energy demand a public utility must

serve. Moreover, the selection of cost-effectiveness tests makes this abundantly clear, and is consistent with this broad definition of a demand-side measure.

DSM Regulation (BC Reg 326/2008) is inconsistent with FortisBC's position in this and previous proceedings. Section 4(1.1) of the *DSM Regulation* requires public utilities to measure cost-effectiveness by application of the total resource cost test (TRC). The *DSM Regulation* (Section 4(6)) also expressly rejects the ratepayer impact measure (RIM). The primary purpose of the TRC is to evaluate the energy efficiency measure net benefits for the entire province. It does not in any way limit the benefits of an energy efficiency measure to those benefits that may be attributed to load reductions of the public utility serving the customer. Unlike the RIM, the TRC does not take the view of individual stakeholders. In particular, it does not include the rate or bill impacts to other customers. In contrast, the TRC does allow for consideration of benefits that may be attributed to resource savings for other resource providers, including self-generation.

- 1.9. The evidence provides an estimated Payback Period of 15.2 years for the Project using a BC Hydro methodology and BC Hydro rates. The evidence does not provide an estimated Payback Period for the Project using FortisBC rates or Zellstoff Celgar's cost of generation. Please provide an estimated Payback Period for the Project using the BC Hydro methodology and

- 1.9.1. 100% of the savings at Zellstoff Celgar's variable cost of generation, and

RESPONSE: Zellstoff Celgar considers its variable cost of generation to be confidential information. Release of this information could harm Zellstoff Celgar's competitive position when negotiating energy sales.

- 1.9.2. 4.6% of the savings at the FBC Rate Schedule 31 energy rate and 95.4% of the savings at Zellstoff Celgar's variable cost of generation?

RESPONSE: Zellstoff Celgar considers its variable cost of generation to be confidential information. Release of this information could harm Zellstoff Celgar's competitive position when negotiating energy sales.

At FortisBC's Rate Schedule 31 energy rate of \$55.16 per MWh, the payback period is 10.3 years:

Revised Project Estimate = \$175,000
Revised Annual Energy Savings = 309 MWh/yr
FortisBC RS 31 Energy Rate = \$55.16/MWh
Value of Annual Energy Savings = \$17,044
Simple payback period = 10.3 years

In order to reduce the payback period to less than two years, the value of the energy saved would need to be greater than \$283 per MWh.

