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August 30, 2018

VIA ELECTRONIC MAIL

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**Attention: Patrick Wruck, Commission Secretary
 and Manager, Regulatory Support**

Dear Sirs/Mesdames:

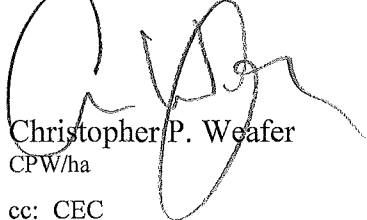
**Re: FortisBC Energy Inc. – 2017 Long Term Gas Resource Plan
 Project Number 1598946**

We are counsel to the Commercial Energy Consumers Association of British Columbia (the "CEC"). Attached please find the CEC's Information Requests with respect to Intervener Evidence with respect to the above-noted matter.

If you have any questions regarding the foregoing, please do not hesitate to contact the undersigned.

Yours truly,

OWEN BIRD LAW CORPORATION



Christopher P. Weafer
 CPW/ha

cc: CEC
 cc: FortisBC Energy Inc.
 cc: Registered Interveners

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

INFORMATION REQUEST ON INTERVENER EVIDENCE

**British Columbia Utilities Commission – FortisBC Energy Inc. 2017 Long Term Gas
Resource Plan ~ Project No. 1598946**

August 30, 2018

1. Exhibit C2-7, page 2 and page 7

- 1. FEI’s LTGRP does not include a specific plan or timeline for determining the potential to use DSM savings to defer capital infrastructure. To ensure FEI’s ability to assess the viability of capacity-focused DSM alternatives in advance of the forecast date of any capacity gap, FEI should prepare a study plan and timeline. The BCUC should not be ‘forced’ to approve supply-side investments that could have been deferred through DSM if FEI had completed its analysis of DSM alternatives in a timely fashion.**

The OEB recognizes the challenge that it has given the gas utilities, to avoid new build by implementing selectively targeted DSM. The OEB agrees that a case study, as proposed by Enbridge, would assist in assessing the merits of a transition plan. However, the OEB is concerned that the time required to complete

a case study would delay the utilities’ infrastructure planning activities proposal and the transition plan would not be available in time for the mid-term review.

The OEB directs Enbridge and Union to work jointly on the preparation of a proposed transition plan that outlines how to include DSM as part of future infrastructure planning activities. The utilities are to follow the outline prepared by Enbridge, and should consider the enhancements suggested by the intervenors and expert witnesses. The transition plan should be filed as part of the mid-term review.¹²

- 1.1. Please provide Mr. Grevatt’s views as to what would constitute a ‘timely’ analysis of DSM alternatives, including how long before the forecast date of capacity gaps the studies should be undertaken and completed.
- 1.2. Would it be prudent to allow time for pilot projects to be developed?

- 1.2.1. If yes, how would that influence the time frames that are required in identifying DSM alternatives in advance of forecast date of capacity gaps.
- 1.3. Please provide a description of what Mr. Grevatt would expect to be included in a 'study plan'.
- 1.4. Does Mr. Grevatt also propose that FEI undertake to develop a 'transition plan'?
 - 1.4.1. If yes, please explain and elaborate on the type of 'transition plan' that Mr. Grevatt would recommend.
 - 1.4.2. If no, please explain why not.
- 1.5. What capacity-focused DSM alternatives would Mr. Grevatt recommend be studied? Please list and provide a brief explanation of the alternative and why it should be included.
- 1.6. Please provide a ballpark estimate of the size of study plan that Mr. Grevatt is recommending in report size and dollar value.

2. Exhibit C2-7 page 4 and 5

FEI's perception that DSM demand measures are inherently too risky for planning purposes is not supported by Con Edison's successful experience in using DSM to defer infrastructure investments:

"...using DSM to defer projects bought time for demand uncertainty to resolve, leading to better capital decision making. Moreover, widespread policy and cultural shifts favoring energy efficiency may further defer some projects to the point where they are never needed...In fact, Con Edison has projected that in the

absence of this program it would have installed up to \$85 million in capacity extensions that may never be needed."⁷

By relying on firm contracts for demand response, Con Edison was able to save money for its customers by using DSM to defer infrastructure investments that it later concluded might never have been needed.

- 2.1. Are there other utilities of which Mr. Grevatt is aware that have had similar success?
 - 2.1.1. If yes, please identify and provide a brief discussion of their results.

- 2.2. Please provide a brief comparison of Con Edison and FEI. Are there any significant differences in size, location, or other factors that might prevent FEI from achieving a similar result?
 - 2.2.1. If yes, please provide Mr. Grevatt's view as to what the differences may be and how they could be expected to influence results.
 - 2.2.2. If no, would Mr. Grevatt expect that FEI could experience capacity savings similar to the \$85 million experience of Con Edison? Please explain why or why not.

3. Exhibit C2-7 page 10

1. The CPR does not attempt to quantify the "Maximum Achievable" savings that are available.

FEI states that its DSM analysis "incorporates all cost effective demand-side measure activity," implying that it is pursuing all the cost-effective savings that are available.

However, the "Market Potential" forecast that FEI uses as a basis for its reference case DSM forecast clearly falls short. This is demonstrated by FEI's analysis of how the

assumed level of incentive spending impacts forecast portfolio level C&EM expenditures and energy savings.¹⁶ This sensitivity analysis showed that annual savings under the assumed Baseline Incentive DSM scenario (which corresponds to the reference case and the Market Potential Forecast) are substantially less than the amount of cost-effective annual savings that would be captured under the Highest Incentive scenario. FEI states that "the Highest Incentive scenario—having aggregate incentives that are 44% higher than the Baseline Incentive scenario—results in 2035 annual savings that are 34% higher than the Baseline Incentive scenario."¹⁷ This shows that FEI's Reference Case DSM scenario, based on the CPR Market Potential, does not include all cost-effective DSM savings.

- 3.1. Please provide Mr. Grevatt's views on whether or not there is potential for long-term value to ratepayers from incorporating all demand side measures available to achieve cost-effectiveness at a portfolio level versus including all those that are cost-effective at an individual program level.

- 3.2. Please provide Mr. Grevatt's views on the potential for increased cost-effectiveness for individual programs to be achieved from having multiple programs operating simultaneously. I.e., is there potential for cost synergies and/or economies of scale or scope to be achieved from running multiple programs?
- 3.2.1. If yes, please comment on how these cost synergies or economies might best be achieved.
- 3.2.2. If yes, please provide any evidence that Mr. Grevatt has with regard to the availability of cost synergies and/or economies and provide quantification if possible.

4. Exhibit C2-7, page 10 and 11

Incentive levels and consumer willingness to adopt measures are two examples of factors that are within the realm of influence of C&EM programs. As FEI has demonstrated in its sensitivity analysis, higher incentives will lead to significantly higher cost effective savings. Similarly, developing program outreach and messaging so as to maximize savings, coupled with an easy and effective participation process, can lead to increased savings by increasing customers' willingness to adopt high efficiency measures. However, such a delivery/incentive scenario is not presented in the LTGRP. This leaves the BCUC without a complete picture of what FEI would be able to achieve—the Maximum Achievable Potential—were it to design and implement its C&EM programs to maximize the capture of cost effective savings.

Unlike the BC CPR, many potential studies include an assessment of maximum achievable savings, which is generally understood to represent an upper bound to the amount of savings that programs that are designed with the intention of capturing all cost effective savings will achieve with high incentives and wide-reaching marketing and outreach campaigns. This provides regulators with better information to use in determining appropriate savings targets, based on the applicable statutes and regulations.

- 4.1. Does Mr. Grevatt have any evidence to suggest that portfolios with multiple DSM measures and high public awareness are likely to experience greater participation and create higher savings on an individual measure basis than they are when presented in isolation of each other? Please explain.

5. Exhibit C2-7, page 12

In the Iowa potential study, the Maximum Achievable potentials are roughly 50% greater than the Achievable potentials. The difference between the two is due to assumptions regarding incentive levels, effectiveness of program marketing and outreach and so on – and many of these factors can be modified to increase or decrease program savings during program design. For FEI’s Reference long-term plan to include “all cost effective savings” it would need to be consistent with an assessment of the Maximum Achievable Potential.

- 5.1. Would Mr. Grevatt expect that FEI could achieve a 50% increase to their ‘Achievable Potential’ if they were to pursue “Maximum Achievable” savings? Please explain why or why not.

6. Exhibit C2-7, pages 15 and 16

The observation that FEI is proposing to save less energy than is cost effectively available is supported by comparing its proposed savings with leading jurisdictions that are achieving much higher savings than are proposed in the Reference Case. FEI indicates that its 2018 savings as a percentage of 2016 sales²⁴ is estimated to be 0.52%,²⁵ and that its average annual Reference Case savings over the 20 year plan period, expressed as a percentage of sales, is 0.36%.²⁶ Reproduced below for convenience is Table 11 from ACEEE’s State Energy Efficiency Scorecard, showing that for 2016 there were 14 U.S. states that achieved a greater percentage of natural gas savings than the 0.52% savings as a percent of sales that FEI expects to achieve in 2018. In fact, nine of these states achieved savings between 0.55% and 1.0% of sales, and five achieved greater than 1.0% savings, with Minnesota in the lead at 1.4% natural gas savings as a percent of sales.²⁷

In providing this ACEEE comparison, I do not intend to suggest that all things are equal in these different jurisdictions, or that FEI can necessarily achieve the 1.4% savings on average during the 20 year planning period that Minnesota did in 2016. Rather, my point is to demonstrate that there is good reason to believe that FEI could cost-effectively achieve much greater savings than the average 0.36% annual savings it suggests for market potential in the Reference Case.

- 6.1. If possible, please provide Mr. Grevatt's expert opinion as to a ballpark estimate of the savings that FEI might be able to achieve.
- 6.2. If possible, please provide Mr. Grevatt's expert opinion as to what might be an appropriate level of savings for FEI to pursue.

7. Exhibit C2-7, Appendix B, Testimony of J. Grevatt on Behalf of Sierra Club and NRDC Colorado PUC Proceeding No. 17A-0462EG page 11

Q. Is it possible to compare the Company's savings achievements with those of leading jurisdictions in North America?

A. Yes. The American Council for an Energy Efficient Economy (ACEEE) is widely recognized for its annual ranking of state energy efficiency program performance. In its assessment, it includes analysis of the annual savings achieved in different states as a percentage of retail electric sales. ACEEE's most recent report, *The 2017 State Energy*

7.1. Is Mr. Grevatt aware of any sources of information that provide some analysis of company savings in Canadian jurisdictions?

7.1.1. If so, please provide.

7.1.2. If no, can Canadian companies appropriately compare themselves to American companies? Please explain why or why not.

8. Exhibit C2-7 Appendix B, Testimony of J. Grevatt on Behalf of Sierra Club and NRDC Colorado PUC Proceeding No. 17A-0462EG page 23 and 24

Is there evidence that the Navigant potential study is calibrated to typical performance?

Yes. One indication of how the 2016 Navigant potential study is calibrated to typical rather than optimal performance is found in Section 5.5.2 *Review of Other DSM Potential Studies*. Navigant's purpose in including this comparison was to "highlight whether the results of the Potential Study might be considered in the realm of what other studies in the region revealed."³² In other words to see if the achievable potential that Navigant identified in the Public Service study is in the ballpark of what was found in other potential studies. The problem is, if the other studies that Navigant used for calibration were also inherently conservative, then all that the comparison accomplishes is to validate that it is equally conservative.

- 8.1. Does Mr. Grevatt believe that the FEI Navigant CPR study is also 'calibrated' to typical rather than optimal performance? Please explain why or why not and provide any evidence that Mr. Grevatt has to support this claim.
- 8.2. Please provide Mr. Grevatt's comments on the Navigant assumptions in the BC CPR regarding:
 - a) Technological advancements
 - b) Behavioural changes
 - c) Implementation costs
 - d) Effects of Regulation and Standards
 - e) Customer acceptance and adoption rates