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**BY ELECTRONIC FILING**

British Columbia Utilities Commission  
Suite 410, 900 Howe Street  
Vancouver, BC V6Z 2N3

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

Dear Sirs/Mesdames:

**Re: FortisBC Energy Inc. 2016 Rate Design Application**

In accordance with the Regulatory Timetable set for this proceeding by Order G-109-17, and the extension granted by Commission letter dated September 28, 2017, we enclose for filing the electronic version of the Reply Argument of FortisBC Energy Inc. on the COSA and revenue to cost ratios.

FEI will be filing separately a book of authorities, with copies of the cases and textbook authority cited in the Reply Argument.

Yours truly,

**FASKEN MARTINEAU DuMOULIN LLP**

*[Original signed by Christopher Bystrom]*

Christopher Bystrom

Encl.

**BRITISH COLUMBIA UTILITIES COMMISSION**  
**IN THE MATTER OF THE UTILITIES COMMISSION ACT,**  
**R.S.B.C. 1996, CHAPTER 473**

**and**

**FORTISBC ENERGY INC.**  
**2016 RATE DESIGN APPLICATION**

**COSA RESULTS AND RANGE OF REASONABLENESS**

**REPLY SUBMISSION OF**  
**FORTISBC ENERGY INC.**

**OCTOBER 2, 2017**

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## **PART ONE: INTRODUCTION**

1. This Reply Submission responds to the submissions made by the British Columbia Old Age Pensioners' Organization *et al.* ("BCOAPO"), the BC Sustainable Energy Association and Sierra Club BC ("BCSEA"), Cascadia Energy Ltd. ("Cascadia"), Catalyst Paper Corporation, ("Catalyst"), the Commercial Energy Consumers Association of British Columbia ("CEC"), and the Industrial Consumer Group ("ICG") on the two key topics identified by the Commission for early determination through a Streamlined Review Process ("SRP"):

- (a) The Cost of Service Allocation ("COSA") studies included in the Application; and
- (b) Whether the revenue to cost ("R:C") ratio; the margin to cost ("M:C") ratio; or a combination of both R:C and M:C ratios should be used to guide rate design and the corresponding range(s) of reasonableness of the selected ratio(s).<sup>1</sup>

2. FEI responds to the topics covered by interveners on the COSA studies in Part Two of this submission and to the topics covered by interveners on the range of reasonableness in Part Three of this submission. Given the repetition of intervener comments, FEI has not responded on a line-by-line basis, but has sought to address the thrust of the interveners' main arguments in the submissions below. Silence with respect to any particular statement made by an intervener should not be interpreted as agreement.

## **PART TWO: COSA STUDIES**

### **A. INTRODUCTION**

3. This part addresses comments from interveners on the COSA studies. Intervenors generally agreed with FEI's approach to the COSA, and there were no issues raised with respect to the COSA study for the Fort Nelson Service Area ("Fort Nelson"). CEC and

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<sup>1</sup> Exhibit A-11, Order G-109-17.

BCOAPO argue for a traditional approach to the Tilbury Expansion Project,<sup>2</sup> ICG disputes that FEI's treatment of Rate Schedules 22A is consistent with past practice,<sup>3</sup> and Catalyst takes issue with FEI's proposed firm Rate Schedule 22.<sup>4</sup> In the sections below, FEI responds to intervenor comments, beginning with a summary of what it believes is the proper scope of this component of the proceeding. FEI submits that the methodologies used in its COSA studies are reasonable and appropriate, and should be approved as filed.

## **B. SCOPE OF THIS COMPONENT OF THE PROCEEDING**

4. In Order G-109-17, the Commission established the regulatory timetable for the proceeding and divided the proceeding into three components. This first component is limited to the key topics of the COSA studies and the range of reasonableness (including whether to use the R:C ratio, M:C ratio or both). FEI understands the scope of this component is essentially those topics included in Section 6 of the Application for FEI and Section 13.4 of the Application for Fort Nelson. The COSA studies presented in Section 6 and Section 13.4 are the COSA studies prior to any rate design changes - i.e., these original COSA studies are based on rates as currently approved. Sections 7 through 11 of the Application (and sections 13.5 and 13.6 for Fort Nelson) address rate design proposals. Section 12 (Section 13.7 for Fort Nelson) describes the impact of the rate design proposals on the COSA (the "Final COSA"), as well as rebalancing based on the Final COSA results.<sup>5</sup>

5. While this component of the proceeding can and should address the methodologies used by FEI in the COSA, it would not make sense to address the Final COSA or rate rebalancing in this component of the proceeding. The change in the Final COSA compared to the original COSA is the impact of the rate design proposals.<sup>6</sup> The impact of the rate design

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<sup>2</sup> CEC Argument, pp. 3-4; BCOAPO Argument, pp. 9-12.

<sup>3</sup> ICG Argument, p. 3.

<sup>4</sup> Catalyst Argument.

<sup>5</sup> Exhibit B-1.

<sup>6</sup> Exhibit B-1, Section 12.1.

proposals depends on what rate design proposals are accepted; if the rate design proposals change, then the impact on the COSA will also change. FEI believes that the Commission cannot make a final determination on what rebalancing is required until the impact of the rate design proposals on the COSA is considered. Therefore, in FEI's submission, it is clear from Order G-109-17 that the rate design Sections of the Application (7 through 11 and 13.5 and 13.6), as well as the impact of those changes on the COSA (Section 12 and 13.7), are to be addressed in the later components of this proceeding, with the Transportation Service Review (Section 10) having its own separate component.

### **C. 10-YEAR LEVELIZED APPROACH TO TILBURY EXPANSION PROJECT**

6. BCOAPO suggests that FEI's 10-year levelized approach may not be prudent because the costs and revenues are untested.<sup>7</sup> Although the costs and revenues associated with the Tilbury Expansion Project will be different than forecast in the Application, using the 10-year levelized approach will be more representative of the impact on customers than the traditional approach.<sup>8</sup> Using 2018 revenues will represent the Tilbury Expansion Project when incremental revenues will be at their lowest, and will understate the revenues for all future years. In response to BCOAPO's question of whether the costs of the Tilbury Expansion Project should also be treated on an incremental basis,<sup>9</sup> FEI has used the same 10-year levelized approach to both the revenues and the costs of the Tilbury Expansion Project.<sup>10</sup>

7. The CEC mischaracterizes FEI's approach to the Tilbury Expansion Project as "manipulating the modeling of its costs...to achieve a particular outcome down the road".<sup>11</sup> FEI's 10-year levelized approach is designed to more accurately reflect the medium-term impact of the project on customers. As noted above, the impact of the traditional approach would

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<sup>7</sup> BCOAPO Argument, p. 12.

<sup>8</sup> Exhibit B-1, Application, p. 6-11; Exhibit B-5, BCUC-FEI IR 1.9.2.

<sup>9</sup> BCOAPO Argument, p. 12.

<sup>10</sup> Exhibit B-5, BCUC-FEI IR 1.9.2.

<sup>11</sup> CEC Argument, p. 3, para. 24.

become more inaccurate each year as incremental revenues associated with the project are achieved. As the revenues will be increasing over time, it is reasonable to take a 10-year levelized approach to estimating the revenues and costs so that the COSA results are more relevant and reflective of the expected circumstances over the next 4 to 6 years. While FEI recognizes that its proposed approach is not “traditional”, the traditional approach is not the only “correct” approach as CEC claims. FEI agrees with Elenchus that rate design is more of an art than a science,<sup>12</sup> and that it is reasonable for FEI to reflect its particular circumstances in its COSA.<sup>13</sup> In this case, the unique attributes of the Tilbury Expansion Project make a 10-year levelized approach preferable.

#### **D. CUSTOMER WEIGHTING FACTOR FOR ADMINISTRATION AND BILLING**

8. FEI is not opposed to conducting a review for future COSA studies of best practices with respect to customer weighting factors for administration and billing as BCOAPO recommends.<sup>14</sup> However, FEI’s customer weighting factors were endorsed by both rate design experts EES Consulting<sup>15</sup> and Elenchus,<sup>16</sup> and are supported by the analysis presented at the SRP regarding the number of Key Account Managers dedicated to industrial customers, and the number of Billing and Measurement Staff dedicated to Transport Customers.<sup>17</sup> FEI’s Customer Weighting Factors for Administration and Billing are reasonable and appropriate.

#### **E. PEAK DAY DEMAND METHODOLOGY**

9. BCOAPO submits that FEI should investigate use of longer periods to derive its peak day demand average.<sup>18</sup> FEI’s concern with using a longer period is that it would put less weight on recent years and may be less representative of the current peak day demand. A

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<sup>12</sup> Transcript Volume 5, p. 432, ll. 25-26.

<sup>13</sup> Transcript Volume 5, pp. 432-433.

<sup>14</sup> BCOAPO Argument, p. 8.

<sup>15</sup> Exhibit B-15, BCUC-FEI Technical IR 1.3.1.

<sup>16</sup> Exhibit A2-2, Elenchus COSA Report, pp. 17-18.

<sup>17</sup> Exhibit B-19, SRP Presentation, p. 17; Transcript Volume 5, pp. 411-413.

<sup>18</sup> BCOAPO Argument, p. 9 and p. 13.

three-year period as used by FEI<sup>19</sup> captures recent trends that are more relevant when allocating costs in the COSA. While FEI is not opposed to investigating potential alternative methods for future COSA studies, FEI's current approach is reasonable and appropriate.

10. BCOAPO also suggests that it might be beneficial for FEI to be required to undertake load studies based on sample demand meters within its other classes.<sup>20</sup> Mr. Gosselin and Ms. Tabone discussed load studies at the SRP, noting that the sample would be subject to a margin of error, and that a regression would still be needed to estimate demand at the design day temperature (coldest day in 20 years).<sup>21</sup> Mr. Todd also noted that demand meters are expensive.<sup>22</sup> FEI is not opposed to conducting such load studies in support of future COSA studies if the Commission determines that it is prudent for FEI to incur the costs to do so.

#### **F. TREATMENT OF RATE SCHEDULES 22A IN THE COSA**

11. ICG disputes that FEI's treatment of Rate Schedule 22A is consistent with past Commission directions,<sup>23</sup> but does not explain why it disputes FEI's position or on what basis. ICG chose not to ask any information requests in round one, chose not to file any intervenor evidence, and asked only one technical information request on an unrelated matter prior to the SRP.<sup>24</sup> ICG also chose to explore the topic in a very limited fashion at the SRP,<sup>25</sup> and now chooses to defer pursuing this issue in argument. As such, it remains ambiguous what exactly the Industrial Customer Group is disputing, and whether it is within the scope of this component of the proceeding or not.

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<sup>19</sup> Exhibit B-1, Appendix 6-7, p. 4.

<sup>20</sup> BCOAPO Argument, p. 13.

<sup>21</sup> Transcript Volume 5, pp. 524-526. Also see p. 420.

<sup>22</sup> Transcript Volume 5, p. 528.

<sup>23</sup> ICG Argument, p. 3.

<sup>24</sup> Exhibit C-9-4.

<sup>25</sup> Transcript Volume 5, pp. 438-452.



12. ICG states that “FEI acknowledges that the terms and conditions [of Rate Schedule 22A] are grandfathered, but not the rates.”<sup>26</sup> As a review of the transcript shows, FEI’s witnesses agreed that the rates for Rate Schedules 22A and 22B change with the revenue requirement, but did not agree that the rates were not grandfathered in any sense at all.<sup>27</sup> Mr. Gosselin clarified that Rate Schedules 22A and 22B are grandfathered with respect to how FEI allocates costs to them in the COSA.<sup>28</sup> FEI’s operations have changed since 1993, including major transmission additions such as the Southern Crossing Pipeline,<sup>29</sup> which make it impossible to allocate costs to Rate Schedules 22A and 22B in “exactly” the same way as in 1993. However, consistent with how the rates for these customers were originally derived, FEI did not allocate a portion of distribution costs to Rate Schedules 22A and 22B on a postage stamp basis.<sup>30</sup> In summary, FEI’s COSA study has appropriately treated Rate Schedules 22A and 22B consistent with past practice and their grandfathered status.

13. ICG states that FEI’s proposal not to rebalance Rate Schedule 22A cannot be justified.<sup>31</sup> FEI submits that rebalancing should be addressed in the component of the proceeding related to “all other matters” as established by Commission Order G-109-17 (the “Rate Design Component”). The impact of rebalancing should be considered along with the impact of all rate design proposals, including whether to continue to grandfather Rate Schedules 22A and 22B. However, if the Commission determines that it should address rebalancing in this component of the proceeding, FEI considers the range of reasonableness of 90 percent to 110 percent to be a guideline:<sup>32</sup> even if a rate schedule falls outside the range of reasonableness, the Commission may determine not to rebalance based on other factors or

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<sup>26</sup> ICG Argument, p. 3, para. 7.

<sup>27</sup> Transcript Volume 5, pp. 440-441.

<sup>28</sup> Transcript Volume 5, pp. 487-488.

<sup>29</sup> See Table 3-3 for a summary of rate design methodologies approved over the years.

<sup>30</sup> Exhibit B-1, Application, p. 12-6; Transcript Volume 5, pp. 487-488.

<sup>31</sup> ICG Argument, p. 3.

<sup>32</sup> Exhibit B-5, BCUC IR 1.53.1; Exhibit B-1, CEC-FEI, 1.3.2.

rate design principles.<sup>33</sup> In this particular case, Rate Schedule 22A and 22B customers have favourable rates due to their grandfathered status.<sup>34</sup> In these circumstances, FEI's view is Rate Schedules 22A should not be rebalanced.

#### **G. PROPOSED RATE SCHEDULE 22 IS A RATE DESIGN ISSUE**

14. FEI submits that the Commission should address Catalyst's submissions related to FEI's proposed Rate Schedule 22 in the Rate Design Component of the proceeding. Catalyst expresses disagreement with how FEI has proposed to derive a postage stamp large industrial rate that would be applicable to, amongst others, the VIGJV. Catalyst disagrees that it should be allocated distribution costs under the proposed Rate Schedule 22, especially in comparison to the grandfathered treatment of Rate Schedules 22A and 22B. Catalyst also raises questions regarding the treatment of interruptible revenue in the design of FEI's proposed Rate Schedule 22.<sup>35</sup> These specific questions have not been explored in information requests to date.

15. The issue taken up by Catalyst is a rate design issue, as it concerns FEI's rate design proposals as described in Section 9 of the Application. As described in Section 6.3.1.5 of the Application, the initial COSA results treat BC Hydro IG and VIGJV revenues as credits to the cost of service. By treating these two customers' revenues as credits to the cost of service, no costs are allocated to them in the initial COSA.<sup>36</sup> Catalyst's arguments do not relate to the treatment of the VIGJV in the initial COSA. Instead, Catalyst's arguments are focussed on the COSA results after Rate Design proposals discussed in Section 9 of the Application, where the BC Hydro IG and VIGJV are grouped together with Rate Schedule 22 customers and are allocated costs based on their firm demand. As the derivation of the proposed Rate Schedule 22 is a rate design issue, the Commission should determine that Catalyst's arguments regarding FEI's proposed Rate Schedule 22 can be resubmitted during the Rate Design Component of the

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<sup>33</sup> Transcript Volume 5, pp. 490-491.

<sup>34</sup> Transcript Volume 5, p. 488.

<sup>35</sup> Catalyst Argument.

<sup>36</sup> Exhibit B-1, pp. 6-9 and 12-6.

proceeding. FEI would also encourage Catalyst to ask its questions regarding the rate design of FEI's proposed Rate Schedule 22 in the next scheduled round of information requests, so that FEI can respond to its concerns.

### **PART THREE: RANGE OF REASONABLENESS**

#### **A. INTRODUCTION**

16. While rate increases due to a change in revenue requirements affect all non-bypass customers equally (in percentage terms), rebalancing through rate design decreases the rates of some customer groups by increasing the rates of other customer groups (a "differential" rate increase). Due to the effects on customers, FEI submits that the Commission requires a strong evidentiary foundation on which to justify a differential rate increase.<sup>37</sup> As has been accepted in this province and in the industry for decades,<sup>38</sup> COSA results that fall within a range of reasonableness do not provide sufficient evidence for the Commission to justify decreasing the rates of some customer groups at the expense of others. As the Commission has consistently recognized, the methodological and other causes of uncertainty inherent in a COSA study mean that the R:C results cannot be interpreted as a precise measure of the cost recovery of a rate schedule.

17. Intervener submissions on the range of reasonableness were split. BCOAPO agrees with FEI that a range of reasonableness of 90 to 110 percent for the R:C ratio is appropriate for FEI's rate design. BCSEA, CEC, ICG, and Cascadia argue for a narrower or no range of reasonableness. While ICG argues for the use of an M:C ratio,<sup>39</sup> the CEC supports the use of an R:C ratio.<sup>40</sup>

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<sup>37</sup> This view is supported by the opinion of Mr. Todd. Transcript Volume 5, pp. 433-434.

<sup>38</sup> E.g., Exhibit B-5, BCUC IR 1.14.1.

<sup>39</sup> ICG Argument, p. 8.

<sup>40</sup> CEC Argument, para. 76.

18. As detailed in the sections below, the submissions of BCSEA and the commercial and industrial intervener groups are inconsistent with the evidence, expert opinion, and the Commission's own determinations about the nature of rate design and the range of reasonableness. Further, the submissions of BCSEA, and the commercial and industrial intervener groups rest on presuppositions about rate design and probabilistic reasoning that are not supported by any evidence and are refuted by the opinion of rate design experts. The evidence and expert opinion in this proceeding, supported by the Commission's past opinions and determinations, support the use of range of reasonableness of 90 to 110 percent using the R:C ratio.

## **B. THE WEIGHT OF HISTORICAL PRECEDENT**

19. ICG makes the claim that historical precedent "has no weight as an argument."<sup>41</sup> As a matter of rate design theory, the expert opinion of Elenchus is that "[t]he most important consideration in choosing an approach is consistency. That is, the same ratio and the same range should be used as the primary reference point on an on-going basis."<sup>42</sup> Elenchus is an independent COSA and rate design expert, and FEI submits that the Commission should give significant weight to Elenchus' opinion on this matter. Further, as discussed below, Elenchus' opinion is consistent with judicial pronouncements, the advice of experts in administrative law, and the Commission's own determinations.

20. While the Commission is not legally bound by past precedents,<sup>43</sup> the Commission should seek to be consistent rather than have decisions that vary arbitrarily. Canadian courts have stressed the importance of consistency, as exemplified by the following quotes from justices of the Supreme Court of Canada:

"As our legal system abhors whatever is arbitrary, it must be based on a degree of consistency, equality and predictability in the application of law. Professor

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<sup>41</sup> ICG Argument, p. 3.

<sup>42</sup> Exhibit A2-10, p. 35.

<sup>43</sup> *Utilities Commission Act*, R.S.B.C. 1996, c. 473, s. 75.

MacLauchlan notes that administrative law is no exception to the rule in this regard:

Consistency is a desirable feature in administrative decision-making. It enables regulated parties to plan their affairs in an atmosphere of stability and predictability. It impresses upon officials the importance of objectivity and acts to prevent arbitrary or irrational decisions. It fosters public confidence in the integrity of the regulatory process. It exemplifies "common sense and good administration"

(H. Wade MacLauchlan, "Some Problems with Judicial Review of Administrative Inconsistency" (1984) 8 Dalhousie L.J. 435, at p. 446.)"<sup>44</sup>

- L'Heureux-Dubé J. in *Domtar Inc. v. Quebec*

"It is obvious that coherence in administrative decision making must be fostered. The outcome of disputes should not depend on the identity of the persons sitting on the panel for this result would be 'difficult to reconcile with the notion of equality before the law, which is one of the main corollaries of the rule of law, and perhaps also the most intelligible one'"<sup>45</sup>

- Gonthier J. in *I.W.A. v. Consolidated Bathurst Packaging Ltd.*

21. Consistent decision making is also encouraged by textbook authority. In addition to the sources noted by L'Heureux-Dubé J. in *Domtar Inc. v. Quebec*, Macaulay & Sprague, *Practice and Procedure Before Administrative Tribunals*, states:

By consistency in decision-making I refer to similar circumstances rendering similar results.

Consistency is important in agency decision-making. It permits the rational development and arrangement of public affairs. Where economic or other planning decisions must be made on the basis of past action or likely expectations, inconsistent decisions by decision-makers can cause financial and other hardships. And inconsistency in action increases uncertainty and costs to

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<sup>44</sup> *Domtar Inc. v. Quebec (Commission d'appel en matière de lésions professionnelles)*, [1993] 2 S.C.R. 756, 1993 CanLII 106 at para. 5, per L'Heureux-Dubé J. Online: <http://canlii.ca/t/1fs1k>.

<sup>45</sup> *I.W.A. v. Consolidated Bathurst Packaging Ltd.*, [1990] 1 S.C.R. 282, at 327 per Gonthier J. Online: <https://beta.canlii.org/en/ca/scc/doc/1990/1990canlii132/1990canlii132.pdf>.

participants as it becomes difficult for consultants and advisors to give advice as to rights and action to be taken.

There is also a psychological importance to consistency in decision-making. It appears to be a basic aspect of human nature that we all expect to be treated the same in similar circumstances. Where this does not happen (and the result is perceived as being less advantageous to the individual) there is a feeling of resentment, a feeling that the decision-maker is acting without good reason (arbitrarily) and a general refusal to accept the decision which can lead to social disorder or malcontent.

Furthermore, in creating a legislative scheme, absent some very unusual and express direction to the contrary. Parliament does not generally intend that scheme to be administered arbitrarily. Striving for consistency in decision-making assists in the avoidance of arbitrary decision-making.

Inconsistent decisions can also result in inefficiencies in the system by leading to increases in applications brought as applicants hope to secure alternative approaches which best serve their personal interests -- perhaps even in hopeless cases, on the basis of "who knows -- maybe I'll strike it lucky!"

Inconsistent actions leads to appeals, judicial reviews with resulting costs to parties and agency in costs, re-hearings, etc.

Inconsistent action creates insecurity and lack of confidence in agency decision-making. If agency members regularly adopt different approaches in similar situations it calls into question the validity of earlier decision-making and shakes the confidence of the public in the agency.

Inconsistency in decision-making can also increase the length of proceedings as participants argue over alternative approaches taken in past.

Inconsistency can cause stress and disunity between decision-makers and a perception of a struggle between alternative views for dominance.

Inconsistency can *sometimes* mask sloppy thinking and a failure to force the mind to fully address an issue.<sup>46</sup>

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<sup>46</sup> Macaulay & Sprague, *Practice and Procedure before Administrative Tribunals*, s. 6.5A.

22. The Commission itself has adopted the practice of consistent decision making, as reflected in the statement on page 25 of the Commission's May 6, 2014 Decision (Order G-60-14) (the "RS 3808 Decision").<sup>47</sup>

... the Commission Panel also acknowledges that existing rates are, by necessary implication, not unjust, unreasonable, unduly discriminatory or unduly preferential if they have already been approved by the Commission.

Because the 1993 PPA was approved by the Commission as fair, the Commission Panel will only evaluate fairness where there is clear evidence that changes in circumstances require the previous fairness determination to be revisited.

23. Similarly, the Commission stated on page 15 of its Decision on the FortisBC Inc. Application for Approval of Stepped and Stand-By Rates for Transmission Voltage Customers (Order G-67-14): "...the Panel notes that any change in rate design naturally results in some initial increase in rate instability. As such, the Panel does not see the need to change an existing rate designs unless there is a clear need to do so..."<sup>48</sup>

### **C. THE ACCURACY OF COSA STUDIES HAS NOT CHANGED**

24. ICG's references to progress and inventions such as email and smart phones<sup>49</sup> are irrelevant and its submissions that the COSA is more accurate due to FEI's ability to "assemble and assess" information, its "analytic capacity" or "experience with COSA studies and rate-setting" are not supported by evidence. Similar submissions by other interveners to

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<sup>47</sup> BCUC, *Decision In the Matter of British Columbia Hydro and Power Authority Application For Approval Of Rates Between BC Hydro And FortisBC Inc. With Regards To Rate Schedule 3808, Tariff Supplement No. 3 – Power Purchase And Associated Agreements, And Tariff Supplement No. 2 To Rate Schedule 3817*, dated May 6, 2014 (Order G-60-14). Online:

[http://www.bcuc.com/Documents/Proceedings/2014/DOC\\_41321\\_05-06-2014\\_BCH\\_PPA-RS%203808-TS-No-2-and-3\\_Decision.pdf](http://www.bcuc.com/Documents/Proceedings/2014/DOC_41321_05-06-2014_BCH_PPA-RS%203808-TS-No-2-and-3_Decision.pdf).

<sup>48</sup> BCUC, *Decision In the Matter of FortisBC Inc. Application for Approval of Stepped and Stand-By Rates for Transmission Voltage Customers*, dated May 26, 2014 (Order G-67-14). Online:

[http://www.bcuc.com/Documents/Proceedings/2014/DOC\\_41435\\_G-67-14\\_FBC-Stepped\\_Standby-Rates\\_WEB.pdf](http://www.bcuc.com/Documents/Proceedings/2014/DOC_41435_G-67-14_FBC-Stepped_Standby-Rates_WEB.pdf).

<sup>49</sup> ICG Argument, pp. 3-4.

the effect that FEI's COSAs are more accurate today are also unsupported by evidence.<sup>50</sup> Mere references to improved technology over time do not demonstrate how the COSA studies are more accurate today.

25. The evidence is that the data and methodologies in the COSA have not materially changed, and that the accuracy of the COSA is the same as it was in 1993.<sup>51</sup> For example, while increased number of demand meters in some rate schedules has assisted in the rate design for those rate schedules, the adoption of demand meters has not occurred for the great majority of small volume customers, and the data available for the cost allocation process have not improved.<sup>52</sup> Further, the accuracy of FEI's COSA has not materially improved because the inaccuracy and uncertainty in the COSA studies is due to challenges that are inherent to the COSA. One of these challenges is that the majority of FEI's costs are shared.<sup>53</sup> This means that FEI's costs must be allocated to customers using a set of allocation methods, which involve estimates, simplifications, judgements and so on. The inaccuracy stems from the fact that there is no correct answer,<sup>54</sup> that there are multiple reasonable methods to come to acceptable results, and that any method will involve judgment and estimations.<sup>55</sup>

26. As noted by the Commission in the *Centra Gas Fort St. John Inc. 1996 and 1997 Revenue Requirements and Rate Design Application Phase II Rate Design Decision*:<sup>56</sup>

The Commission recognizes that judgment is involved in undertaking a cost of service study. Considerable judgment is involved not only in classifying costs into

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<sup>50</sup> E.g., Cascadia Argument, p. 1 and 2. FEI notes that it has not stated that it has access to data to produce "exceedingly accurate data inputs to the COSA study models", or that FEI's past COSA studies were based on "a paucity of data, manual calculation and estimating, and other limitations" which are now "gone."

<sup>51</sup> Exhibit B-15, BCUC Technical IR 1.6.1.

<sup>52</sup> Exhibit B-15, BCUC Technical IR 1.6.1.

<sup>53</sup> Transcript Volume 5, p. 391, and pp. 416-417.

<sup>54</sup> FEI notes that it did not argue that its methodology is the "correct" approach as the Catalyst Argument claims (p. 2). FEI argued that its methodology is a reasonable and appropriate approach.

<sup>55</sup> E.g., Transcript Volume 5, testimony of Mr. Gosselin, pp. 414-423; and testimony of Mr. Todd, pp. 432-433. Mr. Todd for Elenchus also indicated he "would say the same things as FEI has said about the causes of the uncertainty." Transcript Volume 5, p. 433, ll. 23-24.

<sup>56</sup> Exhibit B-5, BCUC IR 1.14.1.



capacity, commodity and customer-related components, but also in determining the appropriate method of allocating these charges among different rate classes. In recognition of these inherent difficulties, the band of reasonableness for rate restructuring adopted by the Commission to date, is the commonly accepted band of plus or minus 10 percent around the ideal 1.0 benchmark ratio.

Similarly, in the 1991 reconsideration decision involving Ocelot Chemicals Inc. and Pacific Northern Gas, the Commission noted “the imprecision inherent in cost of service studies in general”.<sup>57</sup> These features of the COSA have not changed.

27. For this reason, CEC’s argument that the Commission should rebalance to unity because the COSA is based on the best information available<sup>58</sup> misses the mark. While FEI uses the best information available, the results are known to be uncertain, inaccurate and a matter of judgement. The results therefore do not provide sufficient evidence to justify a differential rate change.<sup>59</sup>

28. A key example of the known uncertainty in the COSA is the estimate of peak day demand. At the SRP, Mr. Gosselin explained in detail the method for estimating the peak day demand.<sup>60</sup> The process involves various estimates and averages, a regression analysis, extrapolation of that analysis well beyond the data points used in the regression analysis, followed by further averaging across the service areas, and three years of data. While based on appropriate methods and the best information available, the end result is known to be uncertain. This kind of uncertainty should be taken into account by the Commission when determining whether it has sufficient evidence to order a differential rate change.

29. As the COSA studies are as accurate today as they have been in the past, FEI submits that the Commission should remain consistent with its past determinations on the range of reasonableness. Approving a 90 to 110 percent range for FEI is also consistent with

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<sup>57</sup> Exhibit B-5, BCUC IR 1.14.1.

<sup>58</sup> CEC Argument, pp. 11-13.

<sup>59</sup> Transcript Volume 5, pp. 433-434.

<sup>60</sup> Transcript Volume 5, pp. 417-423.

the Commission's approval of a 95 to 105 percent range for the electric utilities. Because FEI's COSA is known to be less certain than the COSAs for electric utilities,<sup>61</sup> it is appropriate to have a wider range for FEI.

**D. ELENCHUS' AND EES' OBSERVATIONS ON ACCEPTABLE RANGES OF REASONABLENESS ARE CONSISTENT AND ACCURATE**

30. Both Elenchus and EES opine that acceptable ranges of reasonableness are 90 to 110 percent and 95 to 105 percent.<sup>62</sup> CEC asserts that Elenchus is inconsistent and EES is biased,<sup>63</sup> on the grounds that their statements are inconsistent with the results of the jurisdictional review. However, the jurisdictional review covers only six utilities in Canada and does not support CEC's allegations. As discussed in the sections below, EES' and Elenchus' observation that the ranges of reasonableness of 90 to 110 percent and 95 to 105 percent are accepted in the industry are consistent with regulatory decisions in Canada.

**(a) Elenchus and EES Consistent with BCUC Decisions**

31. Elenchus and EES' observations are consistent with the experience in this Province where the Commission has used a 90 to 110 percent range for Pacific Northern Gas and FEI, and a 95 to 105 percent range for BC Hydro and FortisBC Inc. (CEC's claim that EES views are contrary to several past Commission decisions<sup>64</sup> is incorrect. There is nothing in the opinions from EES quoted by the CEC<sup>65</sup> that is contrary to past Commission decisions.)

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<sup>61</sup> See FEI's Final Submission on COSA Studies and Range of Reasonableness, Part Two, Section D.

<sup>62</sup> Exhibit A2-2, p. 29; Exhibit B-11, CEC-FEI IR 1.6.1.

<sup>63</sup> CEC Argument, pp. 29-31.

<sup>64</sup> CEC Argument, p. 31, para. 201.

<sup>65</sup> CEC Argument, p. 31, paras. 199 and 200.

**(b) Regulators Use the 90 to 110 Percent Range of Reasonableness**

32. The case law from regulatory tribunals in Canada shows regulators have approved the use of a 90 to 110 percent range of reasonableness. The cases noted below are examples from four different regulatory tribunals in Canada.

33. In Ontario Energy Board Decision EB-2013-0416/EB-2014-0247 regarding Hydro One Networks Inc., dated March 12, 2015, the Board states at page 45: “The OEB directs Hydro One to move its ratios to 90% - 110% over the three year period for which rates are approved.”<sup>66</sup>

34. In Newfoundland & Labrador Board of Commissioners of Public Utilities Order No. P.U. 13(2013), dated April 17, 2013, the Board states at page 10: “The Board accepts the agreement in relation to rate design and rate structure and will approve rates based on Newfoundland Power's proposal to: i) vary the rate increase by customer class so cost recovery for each class is within the target revenue to cost ratio range of 90% to 110%...”<sup>67</sup>

35. In Prince Edward Island Regulatory and Appeals Commission (the “PEI Commission”) Order UE16-04R regarding Maritime Electric Company, the PEI Commission states at paragraph 46: “Maritime Electric views a RTC [revenue-to-cost] range of 90/110 as an acceptable range for the Company's rate classes.” At paragraph 47 the PEI Commission states: “The 2014 Cost Allocation Study (like cost allocation studies in the past) confirmed the existence of disproportionate RTC ratios in Maritime Electric's current rate structure. While the RTC ratio for the residential rate classes (excluding seasonal and farm customers) was 92%, the RTC ratio for the general service rate class was in excess of 110%.” As discussed in paragraphs

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<sup>66</sup> Ontario Energy Board, Decision EB-2013-0416/EB-2014-0247, *In the Matter of an Application by Hydro One Networks Inc. for Approval of Distribution Rates for 2015-2019*, dated March 12, 2015. Online: [https://www.oeb.ca/oeb/Documents/Decisions/Dec\\_Hydro\\_One\\_DX\\_20150312.pdf](https://www.oeb.ca/oeb/Documents/Decisions/Dec_Hydro_One_DX_20150312.pdf).

<sup>67</sup> Newfoundland & Labrador Board of Commissioners of Public Utilities, Order No. P.U. 13(2013), *Decision and Order of the Board In the Matter of a General Rate Application Filed by Newfoundland Power Inc.*, dated April 17, 2013. Online: <http://www.pub.nf.ca/orders/order2013/pu/pu13-2013.pdf>.

48-49, Maritime Electric proposed to defer any changes to address the RTC ratio while it undertook consultation. The PEI Commission approved Maritime Electric's proposal to defer addressing the R:C ratio at paragraph 57.<sup>68</sup>

36. In Yukon Utilities Board Order 2005-1 regarding Yukon Energy Corporation (January 27, 2005), the Board stated at section 3.1 of its reasons: "Board Order 1996-7 required the Companies to adjust rates for all customer classes over a ten year period to reflect a cost of service in the range of 90 percent to 110 percent". At section 4.0 of its reasons: "The Board requires the Companies to jointly file a report by Thursday, September 1, 2005, that provides information on the revenue to cost ratios by customer class for both Companies utilizing the most recent cost of service allocation study. If the report indicates that the revenue to cost ratios by customer class are outside the range of 90 percent to 110 percent, then the Companies are to provide their views on whether an updated cost of service allocation study should be undertaken or if a rate shift proposal can be made based on the most recent cost of service allocation study."<sup>69</sup>

**(c) Regulators use a 95 to 105 percent Range of Reasonableness**

37. There are also other examples of regulators using a 95 to 105 percent range of reasonableness.

38. In *Nova Scotia Power Incorporated (Re)*, 2014 NSUARB 53, the Nova Scotia Utility and Review Board accepted a 95 to 105 percent range, stating:<sup>70</sup>

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<sup>68</sup> Prince Edward Island Regulatory and Appeals Commission, Order UE16-04R, *In the Matter of an Application by Maritime Electric Company, Limited to Approve the Rates, Tolls and Charges for Electric Service for the Period Beginning March 1, 2016 and for Certain Approvals Incidental Thereto*, dated July 11, 2015 (Docket UE20942). Online: <http://www.irc.pe.ca/orders/electric/2016/Order-UE16-04-Combined.pdf>.

<sup>69</sup> Yukon Utilities Board, Board Order 2005-1, *In the Matter of an Application by Yukon Energy Corporation for Approval of 2005 Revenue Requirements*, dated January 27, 2005. Online: [http://yukonutilitiesboard.yk.ca/pdf/Board%20Orders%202000/106\\_boardorder2005\\_1.pdf](http://yukonutilitiesboard.yk.ca/pdf/Board%20Orders%202000/106_boardorder2005_1.pdf).

<sup>70</sup> *Nova Scotia Power Incorporated (Re)*, 2014 NSUARB 53I. Online: <http://canlii.ca/t/g63kl>.

[137] The Board accepts the evidence of NSPI that the current 0.95 to 1.05 band is commonly applied in Canada. Further, it notes that either expanding or narrowing the band (both of which were referred to at times in this proceeding) could have negative consequences on some customer classes and/or would reduce the flexibility of the Board to apply rates in a reasonable and appropriate fashion across NSPI's various customer classes.

[138] The Board notes that in the past it has had occasion to address the concerns expressed by the SBA. In the 2012 GRA, the Board capped the R/C ratio for two of the SBA's customer groups to 1.03. However, in a number of recent GRA proceedings, rate level issues were dealt with by way of settlement agreement negotiated among the parties.

[139] While the Board is mindful of the SBA's concerns on this issue, it is satisfied that the current R/C band of 0.95 to 1.05 is appropriate and should be maintained. The application of the R/C band is a rate design tool held by the Board in the setting of rates. Where it is in the public interest to do so, the Board will use the R/C band, or apply other recognized ratemaking methods, to reduce the impact of rates on one or more customer classes.

39. Other electric utilities regulated by the Nova Scotia Utilities and Review Board use a 95 to 105 percent range of reasonableness. In *Re Canso Electric Light Utility*, 2015 NSUARB 195 at paragraph 10, the Board noted: "The Utility's current, and proposed, rates are outside of the 95 – 105% revenue/cost range by customer class established by the Board in other electricity rate decisions."<sup>71</sup>

40. In the New Brunswick Energy and Utilities Board Decision re an application by New Brunswick Power Corporation's for the approval of a Class Cost Allocation Study methodology (Matter No. 271), dated May 13, 2016, the Board states at paragraph 10: "In the decision of December 21, 2005, the New Brunswick Board of Commissioners of Public Utilities

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<sup>71</sup> *Canso Electric Light Utility (Re)*, 2015 NSUARB 195. Online: <http://canlii.ca/t/gkcnv>.

(PUB) indicated that ‘... a long term target range of .95 to 1.05 for the revenue to cost ratio for each class is reasonable.’ This continues to be the view of the Board.”<sup>72</sup>

41. The Alberta Energy Board also applied a 95 to 105 percent range:

- In Alberta Energy and Utilities Board Decision U99034, re Alberta Power Limited, dated August 10, 1999, the Board states at page 33: “The Board notes IPPSA/SPPA recommended that all rate classes should migrate to a 100% revenue-to-cost ratio. The Board has stated in the past that the revenue-to-cost ratio should migrate to 95% to 105% revenue to cost over time. The Board considers 95% to 105% is still a valid target for rate classes during the transition to 2001.”<sup>73</sup>
- In Alberta Energy and Utilities Board Decision 2004-079, re Atco Pipelines, dated 2004-079, the Board stated at p. 51: “The Board has traditionally reflected cost causation as a primary rate design principle by endeavoring to approve rates which result in revenue/cost ratios within a 95 - 105% range. The Board is of the view that cost of service analysis is not an exact science, and that blind adherence to a 100% revenue-to-cost ratio in the design of rates would not be appropriate. Further, the consideration of other rate design criteria such as rate stability, mitigation of rate shock and customer acceptance, may conflict with the desire to achieve the desired 95 - 105% range.”<sup>74</sup>

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<sup>72</sup> New Brunswick Energy and Utilities Board, *Decision In the Matter of an Application by New Brunswick Power Corporation pursuant to the Electricity Act, S.N.B. 2013, c.7, for the Approval of a Class Cost Allocation Study Methodology*, dated May 13, 2016 (Matter No. 271).

Online: [http://www.nbeub.ca/opt/M/get\\_decision.php?&id=456&no=586](http://www.nbeub.ca/opt/M/get_decision.php?&id=456&no=586).

<sup>73</sup> Alberta Energy and Utilities Board, Decision U99034, *Alberta Power Limited 1996 General Rate Application – Phase II*, dated August 10, 1999.

Online: [http://www.auc.ab.ca/regulatory\\_documents/ProceedingDocuments/1999/U99034.pdf](http://www.auc.ab.ca/regulatory_documents/ProceedingDocuments/1999/U99034.pdf).

<sup>74</sup> Alberta Energy and Utilities Board, Decision 2004-079, *ATCO Pipelines 2004 General Rate Application Phase II*, dated September 24, 2004.

Online: [http://www.auc.ab.ca/regulatory\\_documents/ProceedingDocuments/2004/2004-079.pdf](http://www.auc.ab.ca/regulatory_documents/ProceedingDocuments/2004/2004-079.pdf).

- In Alberta Energy and Utilities Board Decision 2007-086, re Atco Electric Ltd., dated November 8, 2007, the Board states at p. 43: “The Board finds that it is appropriate to limit the increase to any rate class to 10% for the rates arising out of this Phase II proceeding. The Board notes that the 10% rate cap will be applicable to the irrigation rate and possibly to the streetlight classes. Both of these rate classes are comparatively small and therefore the effect on keeping these two rate classes outside of the generally accepted revenue to cost range of 95% to 105% will be relatively minor to the other rate classes.”<sup>75</sup>

**(d) EES’ and Elenchus’ Views are Accurate and Should be Relied Upon**

42. The cases above demonstrate that the observations of Elenchus and EES are supported by regulatory decisions in Canada. Given the vast number of decisions of regulators throughout Canada and the U.S., it is appropriate for the Commission to rely on the expert opinion of Elenchus and EES, both of which have stated that ranges of reasonableness of 90 to 110 and 95 to 105 percent are accepted in the industry.

**E. JURISDICTIONAL ANALYSIS SHOWS A RANGE OF PRACTICES INCLUDING 90 TO 110 PERCENT**

43. The jurisdictional evidence does not support a “directional trend” in Canada to rebalance to unity or an increasing rejection of the range of reasonableness as CEC and ICG claim.<sup>76</sup> The CEC relies heavily on the survey by Elenchus of six natural gas utilities. The results of the six utilities surveyed shows a range of practices, and is not evidence of any trend.

- (a) Three utilities (in Alberta and Saskatchewan) use a range of reasonableness of 95% to 105%, which is similar to the Commission’s practice in BC with respect to electric utilities (BC Hydro and FortisBC Inc.).

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<sup>75</sup> Alberta Energy and Utilities Board, Decision 2007-086, *ATCO Electric Ltd. 2008 Distribution Tariff Phase II*, dated November 8, 2007. Online: [http://www.auc.ab.ca/regulatory\\_documents/ProceedingDocuments/2007/2007-086.pdf](http://www.auc.ab.ca/regulatory_documents/ProceedingDocuments/2007/2007-086.pdf).

<sup>76</sup> CEC Argument, pp. 12 and 27; ICG Argument, p. 7.

- (b) Two utilities (Union Gas and Enbridge in Ontario) use a range of “close to unity”. This does not mean unity as CEC claims,<sup>77</sup> but “a smaller range than 95% to 105%.”<sup>78</sup>
- (c) Only one utility, in Manitoba, uses unity.

44. As noted above, “close to unity” as used by Elenchus means “a smaller range than 95% to 105%.”<sup>79</sup> This does not appear to be a hard-and-fast rule. In the Union Gas rate design decision referenced by Elenchus, the Ontario Energy Board state a principle that R:C ratios should not move “farther away from 1.0” than those presently approved, and refers to approved R:C ratios substantially below unity:

The Board agrees with Board staff, that in general, applied-for revenue-to-cost ratios for in-franchise customers should not move farther away from 1.0 than the revenue-to-cost ratios that are presently approved and reflected in rates. The Board notes that for a number of in-franchise rate classes, the EB-2005-0520 Board-approved revenue-to-cost ratios were closer to unity than the revenue-to-cost ratios proposed in this proceeding. These rate classes are: Rate 01 (from 0.976 to 0.975), Rate 25 (from 0.467 to 0.446), Rate M2 (from 0.972 to 0.940), Rate M5A (from 0.824 to 0.746), and Rate M10 (from 0.131 to 0.073). As a result, the Board finds that the proposed revenue to cost ratios are not appropriate. [Emphasis added.]<sup>80</sup>

45. In addition, a number of Enbridge and Union Gas rates have R:C ratios lower than 1.0.<sup>81</sup>

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<sup>77</sup> CEC Argument, p. 12, para. 93.

<sup>78</sup> Exhibit A2-10, Table 4, p. 33.

<sup>79</sup> Exhibit A2-10, Table 4, p. 33.

<sup>80</sup> Ontario Energy Board, Decision and Rate Order EB-2011-0210, *In the Matter of an Application by Union Gas Limited for an Order or Orders Approving or Fixing Just and Reasonable Rates and Other Charges for the Sale, Distribution, Transmission and Storage of Gas Commencing January 1, 2013*, dated January 17, 2013, p. 85. Online: <https://www.oeb.ca/industry/applications-oeb/major-decisions/archived-decisions>.

<sup>81</sup> Exhibit A2-5, BCUC-Elenchus IR 1.9.5.



46. Beyond the six utilities surveyed, CEC emphasizes Puget Sound Energy and Manitoba.<sup>82</sup> However, there is other information which the Commission should take into account:

- Within BC, the Commission has applied a 90 to 110 range for gas utilities (FEI and Pacific Northern Gas) for at least 30 years.<sup>83</sup>
- The Ontario Energy Board approved a 90 to 110 percent range for Hydro One Networks.<sup>84</sup>
- The Ontario Energy Board uses a range of reasonableness of wider than 90 to 110 percent for other electric utilities.<sup>85</sup>
- The Prince Edward Island Regulatory and Appeals Commission approved a 90 to 110 percent range for Maritime Electric Company.<sup>86</sup>
- The Newfoundland & Labrador Board of Commissioners of Public Utilities approved a 90 to 110 percent range for Newfoundland Power.<sup>87</sup>
- The Yukon Utilities Board approved a 90 to 110 percent range for the Yukon Energy Corporation.<sup>88</sup>

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<sup>82</sup> CEC Argument, p. 30.

<sup>83</sup> Exhibit B-5, BCUC IR 1.14.1.

<sup>84</sup> Ontario Energy Board, Decision EB-2013-0416/EB-2014-0247, *In the Matter of an Application by Hydro One Networks Inc. for Approval of Distribution Rates for 2015-2019*, dated March 12, 2015. Online: [https://www.oeb.ca/oeb/Documents/Decisions/Dec\\_Hydro\\_One\\_DX\\_20150312.pdf](https://www.oeb.ca/oeb/Documents/Decisions/Dec_Hydro_One_DX_20150312.pdf).

<sup>85</sup> Exhibit A2-13, BCOAPO-Elenchus IR 2.10.1.

<sup>86</sup> Prince Edward Island Regulatory and Appeals Commission, Order UE16-04R, *In the Matter of an Application by Maritime Electric Company, Limited to Approve the Rates, Tolls and Charges for Electric Service for the Period Beginning March 1, 2016 and for Certain Approvals Incidental Thereto*, dated July 11, 2015 (Docket UE20942). Online: <http://www.irac.pe.ca/orders/electric/2016/Order-UE16-04-Combined.pdf>.

<sup>87</sup> Newfoundland & Labrador Board of Commissioners of Public Utilities, Order No. P.U. 13(2013), *Decision and Order of the Board In the Matter of a General Rate Application Filed by Newfoundland Power Inc.*, dated April 17, 2013. Online: <http://www.pub.nf.ca/orders/order2013/pu/pu13-2013.pdf>.

<sup>88</sup> Yukon Utilities Board, Board Order 2005-1, *In the Matter of an Application by Yukon Energy Corporation for Approval of 2005 Revenue Requirements*, dated January 27, 2005.

- Within BC, the Commission has applied a 95 to 105 range for electric utilities (FortisBC Inc. and BC Hydro).<sup>89</sup>
- The Nova Scotia Utility and Review Board approved a 95 to 105 percent range for electric utilities.<sup>90</sup>
- The New Brunswick Energy and Utilities Board approved a 95 to 105 percent range for electric utilities.<sup>91</sup>
- The Alberta Energy Board approved a 95 to 105 percent range.<sup>92</sup>

47. The decisions of regulators show a range of practices, including unity, 95 to 105 percent, 90 to 110 percent, and wider ranges. There is no evidence to support a trend in Canada in any direction.

#### **F. "PATTERN" OF HISTORICAL R:C RATIOS IS DUE TO CONSISTENT METHODOLOGY**

48. Cascadia<sup>93</sup> and ICG<sup>94</sup> argue that the historical R:C ratios show a bias. As stated in response to CEC Technical IR 1.69.1: "To FEI's knowledge all of the historical COSAs were not biased; nor were the COSAs designed to favour any customer group preferentially over another."<sup>95</sup> Neither Cascadia nor ICG filed or referenced any evidence to show any bias in the COSA studies beyond that referenced in the historical R:C/M:C ratio results. Any consistent

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Online: [http://yukonutilitiesboard.yk.ca/pdf/Board%20Orders%202000/106\\_boardorder2005\\_1.pdf](http://yukonutilitiesboard.yk.ca/pdf/Board%20Orders%202000/106_boardorder2005_1.pdf).

<sup>89</sup> Exhibit B-11, CEC IR 1.5.2.

<sup>90</sup> *Nova Scotia Power Incorporated (Re)*, 2014 NSUARB 53. Online: <http://canlii.ca/t/g63kl>.

<sup>91</sup> New Brunswick Energy and Utilities Board, *Decision In the Matter of an Application by New Brunswick Power Corporation pursuant to the Electricity Act, S.N.B. 2013, c.7, for the Approval of a Class Cost Allocation Study Methodology*, dated May 13, 2016 (Matter No. 271). Online: <http://www.nbeub.ca/opt/M/browserecord.php?action=browse&-recid=456>.

<sup>92</sup> Alberta Energy and Utilities Board, *Decision 2007-086, ATCO Electric Ltd. 2008 Distribution Tariff Phase II*, dated November 8, 2007. Online: [http://www.auc.ab.ca/regulatory\\_documents/ProceedingDocuments/2007/2007-086.pdf](http://www.auc.ab.ca/regulatory_documents/ProceedingDocuments/2007/2007-086.pdf).

<sup>93</sup> Cascadia Argument, p. 2.

<sup>94</sup> ICG Argument, p. 5.

<sup>95</sup> Exhibit B-18.

pattern in the COSA results over time can be explained by the fact that FEI's COSA studies have been conducted consistent with past practice.<sup>96</sup> Using the same methodologies over time allows the results of the COSA studies to show the movement of costs over time, rather than movements due to methodological changes. There is therefore no evidence to suggest a bias in the COSA studies.

**G. PAST RATES ARE JUST AND REASONABLE, AND SHOW NO EVIDENCE OF "OVER-PAYMENT"**

49. The various claims made by CEC,<sup>97</sup> Cascadia<sup>98</sup> and ICG<sup>99</sup> that they have been over-paying or subsidizing other customers in the past, based on historical R:C ratios, are incorrect. Past rates have been determined to be just and reasonable by the Commission, and rates within the range of reasonableness have been determined as a fact to be recovering their fair share of costs. Section 59(4) of the *Utilities Commission Act* states that the Commission is the sole judge of whether rates are recovering their fair share of costs:

(4) It is a question of fact, of which the commission is the sole judge,

(a) whether a rate is unjust or unreasonable,

(b) whether, in any case, there is undue discrimination, preference, prejudice or disadvantage in respect of a rate or service, or

(c) whether a service is offered or provided under substantially similar circumstances and conditions.

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<sup>96</sup> Exhibit B-1, Application, Appendix 6-1, EES Report, p. 1.

<sup>97</sup> CEC Argument, p. 21.

<sup>98</sup> Cascadia Argument, p. 2.

<sup>99</sup> ICG Argument, p. 5.

50. The Commission has rightly acknowledged “that existing rates are, by necessary implication, not unjust, unreasonable, unduly discriminatory or unduly preferential if they have already been approved by the Commission.”<sup>100</sup>

51. For this reason, the CEC’s suggestion that the Commission should conduct a cost-benefit analysis based on calculations of the amount that rate schedules have allegedly “over-paid” over the past 20 years<sup>101</sup> would lead the Commission in an error of fact and law. Past rates have been approved by the Commission and as matter of fact and law have been determined to be not unjust, unreasonable, unduly discriminatory or unduly preferential. Therefore, the past R:C ratios do not show any history of “over-payment” or “under-payment” by any rate class.

#### **H. ARGUMENT THAT COSA IS A STATISTICAL EXERCISE HAS BEEN REFUTED BY ELENCHUS**

52. BCSEA, CEC and ICG each argue in various ways that COSA results should be thought of statistically.<sup>102</sup> The intervener submissions on this point are not supported by any evidence, and have been refuted by the opinion of the rate design experts in this proceeding. FEI submits that this is a complex matter that is properly the subject of expert opinion, and that the Commission should give significant weight to those qualified to opine on the topic.

53. Elenchus responded to CEC IR 18.4 as follows:

18.4 Please confirm that an R:C ratio of 1 would be indicative of an equal (50:50) probability that a rate class is contributing more or less revenue than its costs of service.

RESPONSE:

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<sup>100</sup> RS 3808 Decision (Order G-60-14), p. 35.

<sup>101</sup> CEC Argument, pp. 22-23.

<sup>102</sup> E.g., ICG argues that the “level of certainty should be symmetrical for all customer groups” (p. 4) and assumes that the COSA “distributes the uncertainty fairly” (p. 5). CEC argues similarly at p. 12, para. 98 of its Argument.

Elenchus does not view it as appropriate to interpret an R:C ratio in this way. Cost allocation is not a statistical exercise that has a probabilistic interpretation.

Given the imprecision of COSA models, which derives in part from the fact that there are multiple legitimate methods that can be used to allocate costs, each one producing a different R:C ratio, Elenchus is of the view that any R:C ratio that is within the defined range of reasonableness can be considered to be full cost recovery. An R:C ratio that is below the range is considered to indicate under-recovery of costs and any R:C ratio that is above the range indicates over-recovery of costs.

In a probabilistic situation, such as a sample survey, there is a true value that is being estimated. In the case of cost allocation there is no underlying true value that is being estimated. There are multiple possible ways of defining cost causality, each of which is equally valid, which implies that is a range of values that could each be considered to be the true value. In COSA work, rather than attempting to determine R:C ratios using multiple reasonable methods, a range of reasonableness is used.

54. The CEC claims that “Mr. Todd was unwilling to discuss the issue of probabilistic statistics in the SRP.”<sup>103</sup> In fact, Mr. Todd simply disagreed with the attempt to apply probabilistic reasoning to the results of the COSA. Mr. Todd stated:

But what I have said repeatedly is, a range of reasonableness is not the same thing as a confidence interval in statistics.

... And what I'm saying is that the concept – in the way you're taking these words is different than the way they're intended. We're saying there is range. There is uncertainty about what is correct.

There is also uncertainty in terms of the right way to think about and do cost allocation. There are conceptual differences when it comes to cost allocation that do not exist when you're doing a statistical analysis. ...<sup>104</sup>

55. BCSEA’s argument is that the farther away a rate class’s R:C ratio is from unity the stronger the weight of evidence is that the class is paying more or less than its share of

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<sup>103</sup> CEC Argument, p. 15.

<sup>104</sup> Transcript Volume 5, p. 509.

costs.<sup>105</sup> BCSEA pursued this line of reasoning with Mr. Todd at the SRP. Mr. Todd unequivocally rejected BCSEA's view:

MR. TODD: What you're doing is taking a paragraph out of context of the full report, and trying to give it meaning that is not there. Meaning that is there says that there are different ways you can do a cost allocation study that will give different results, all of which are valid, all of which are legitimate different ways of approaching it. If you take one particular one, and you must choose one method for any particular company in any particular jurisdiction, the larger the deviation, i.e. the larger the range of reasonableness, the more certain you are that no matter how you do the cost allocation, you'd come up with the same directional impact.

MR. ANDREWS: So, what you just said, applied to multiple methodologies, the same analysis that I asked you about to do about one methodology, and in both cases - - I mean what I understood you to just say is that in any methodology, the larger the deviation from one, the more likely the results are indicative of the true difference, compared to imprecision in the methodology? And I am proposing that as a pretty straightforward conclusion.

MR. TODD: You are proposing that, but I am disagreeing with you, because implicit in your question is the assumption is that there is one correct and true allocation of classes. What I'm trying to say is there is no single true underlying allocation, that is the right number, similar to doing a survey of public opinion. If you surveyed everybody in the country, you would get a true result of the opinion. When you do a sample survey, you get an estimate of that true underlying value.

Here, there is no true underlying value in terms of allocating costs. You are not using a statistical estimation technique, you are doing different methods that are trying to define equity.<sup>106</sup>

56. Mr. Todd specifically rejected BCSEA's contention that there is "directionality" within the range of reasonableness:

MR. TODD: Yes, but let's use the words carefully. It is called a range of reasonableness, for a reason. It is saying that within that range or

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<sup>105</sup> BSCSEA Argument, p. 4.

<sup>106</sup> Transcript Volume 5, pp. 512-514.

reasonableness the rates your charging customers in order to recover costs are reasonable. It's not saying that 99 is more reasonable then 97. It's saying that if you accept the range of reasonable 90 to 110, that 91 is reasonable, 95 is reasonable, 100 is reasonable, 105 is reasonable.<sup>107</sup>

57. EES similarly opines that there is no recognized difference amongst R:C ratios within the range of reasonableness.<sup>108</sup>

#### **I. INTERVENER SUBMISSIONS “BEG THE QUESTION”**

58. A systemic issue in the submissions of the Cascadia and the Industrial Customer Group is that they “beg the question” in the logical sense. An argument that begs the question is logically false because it assumes the truth of the conclusion that it is trying to prove. The Cascadia and the Industrial Customer Group make arguments that assume that only an R:C ratio of 1.0 indicates that a rate schedule is recovering its fair share of costs. However, this is precisely the issue being debated. The theory of the range of reasonableness is that all R:C ratios within the range indicate the rate schedule is recovering its fair share of costs.

59. A few examples are:

- Cascadia presents as a “fact” that the results of the COSA study show misalignment of rates, and that there is a cross-subsidy from commercial and industrial groups to the residential customers.<sup>109</sup> This does not support Cascadia’s position, as it is only a “fact” if one accepts that there is no range of reasonableness.
- ICG states: “The argument that a R:C ratio of 90 is the same as a R:C ratio of 110 ignores the economic reality that the customer at 110 percent is paying

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<sup>107</sup> Transcript Volume 5, p. 515.

<sup>108</sup> Transcript Volume 5, pp. 491-492.

<sup>109</sup> Cascadia Argument, pp. 1-2.

higher rates than necessary based on the COSA results.”<sup>110</sup> Again, this type of argument assumes the economic reality, rather than demonstrates what that economic reality is. The range of reasonableness says that, due to uncertainty in the COSA, the economic reality is that all R:C ratios within the range are paying their fair share of costs.

- ICG argues that the “wider the range of reasonableness the greater the inequity between the rate classes.”<sup>111</sup> While ICG may believe this to be true, no inequity has been demonstrated. The concept of the range of reasonableness is that there is no inequity within the range because the results are uncertain.

60. In short, instead of demonstrating what the facts, economic reality or equities are, these arguments simply assume the conclusion they are seeking to prove. This type of argument should not be given any weight.

#### **J. REVENUE REQUIREMENTS NOT A GOOD ANALOGY**

61. CEC’s argument that the Commission could not apply a range of reasonableness to revenue requirement decisions is not a good analogy.<sup>112</sup> In revenue requirements, the Commission must determine a particular number for rate-setting purposes. While the Commission could potentially find that any number within a range would be reasonable, the Commission must ultimately approve a rate and therefore cannot apply a range of reasonableness. In rate design, the Commission is determining whether there is sufficient evidence to justify a differential rate change – it is a yes or no question where a range of reasonableness makes sense to apply: the range of reasonableness indicates that the Commission has found that any result within a range does not provide sufficient evidence for a differential rate change. In addition, there arguably is a correct answer in revenue

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<sup>110</sup> ICG Argument, p. 5, para. 17.

<sup>111</sup> ICG Argument, p. 5, para. 19.

<sup>112</sup> CEC Argument, pp. 15-16.



requirements, such as what the utility will in fact spend in the test year, and what the savings from demand-side management activities will actually be. As discussed by Elenchus, there is no “correct” answer in cost allocation.<sup>113</sup>

**K. ELENCHUS AND FEI IR RESPONSES WERE REASONABLE RESPONSES TO LOADED QUESTIONS**

62. CEC reviews various responses of Elenchus and FEI to CEC information requests, claiming that the responses are “obfuscation”, or incorrect or biased or all three. FEI and Elenchus’ responses were reasonable in the circumstances, since both FEI and Elenchus fundamentally disagree with the premise of CEC’s questions. CEC’s questions asked for opinions to which neither Elenchus nor FEI could agree. In other words, CEC’s questions were “loaded questions” designed to elicit responses that CEC could use to support its view that a range of reasonableness should not be used. FEI disagrees with the CEC’s view, as does Elenchus, and therefore could not provide the responses that CEC desired. This does not make FEI’s responses incorrect or biased or obfuscation; rather, FEI simply disagrees with the CEC on the issue of the range of reasonableness.

63. In its review of FEI’s and Elenchus’ responses, CEC provides submissions that appear to be what CEC believes the responses to its IRs should have been. CEC’s submissions make claims about rate design that are not supported by evidence in this proceeding. FEI submits that the Commission must accord significantly more weight to the expert testimony of Elenchus and EES than to the CEC’s submissions.

**L. R:C RATIOS ARE PREFERABLE TO M:C RATIOS**

64. While ICG favours the use of an M:C ratio as it removes flow-through costs,<sup>114</sup> CEC submits that it supports the use of the R:C ratio stating that R:C is “the ratio traditionally

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<sup>113</sup> Transcript Volume 5, pp. 512-514.

<sup>114</sup> ICG Argument, p. 8.

used by other gas utilities”.<sup>115</sup> The evidence shows that the use of the R:C ratio is an acceptable practice in the industry,<sup>116</sup> and shows the actual impact to customers when rebalancing rates.<sup>117</sup> FEI therefore submits that using the R:C ratio is a reasonable and appropriate approach and should be continued.

#### **PART FOUR: CONCLUSION**

65. FEI submits that the Commission should approve FEI’s COSA studies and range of reasonableness, determining that the methodologies used by FEI in its COSA studies and its proposed range of reasonableness of 90 to 110 percent of the R:C ratio are reasonable and appropriate for the purposes of FEI’s rate design and setting rates for the utility.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Dated: October 2, 2017 ***[original signed by Christopher Bystrom]***  
Christopher Bystrom  
Counsel for FortisBC Energy Inc.

Dated: October 2, 2017 ***[original signed by Tariq Ahmed]***  
Tariq Ahmed  
Counsel for FortisBC Energy Inc.

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<sup>115</sup> CEC Argument, para. 76.

<sup>116</sup> Exhibit A2-10, p. 35: “the R/C is so widely accepted that it would not be inappropriate as the primary reference.” Also, Exhibit A2-13, BCOAPO-Elenchus IR 2.11.4.

<sup>117</sup> Transcript Volume 5, p. 426.