British Columbia Utilities Commission

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ORDER NUMBER
G-119-16

IN THE MATTER OF
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

FortisBC Energy Inc.
Proposal for Depreciation and Net Salvage Rate Changes

BEFORE:
D. A. Cote, Panel Chair/Commissioner
D. J. Enns, Commissioner

on July 28, 2016

ORDER

WHEREAS:

A. On December 7, 2015, the British Columbia Utilities Commission (Commission) issued Order G-193-15 establishing interim delivery rates for FortisBC Energy Inc. (FEI) effective January 1, 2016;

B. On December 21, 2015, the Commission issued its Reasons for Decision in support of Order G-193-15. As part of these Reasons for Decision, the Commission did not approve FEI's requested changes to depreciation and net salvage rates. The Commission directed FEI to maintain existing depreciation and net salvage rates and to submit additional information and analysis on its proposed changes by February 29, 2016;

C. On February 29, 2016, FEI filed the additional information and analysis requested by the Commission (Application);

D. By Order G-41-16 dated March 24, 2016, the Commission established a regulatory timetable for review of the Application, which included one round of information requests followed by submissions from FEI and registered interveners on further process;

E. On May 9, 2016, FEI and the British Columbia Old Age Pensioners' Organization *et al*. filed submissions on further process;

F. By Order G-65-14 dated May 11, 2016, the Commission directed that the hearing proceed to written final and reply arguments; and

G. The Commission considered the Application, evidence and arguments of the parties.

NOW THEREFORE pursuant to sections 59 to 61 of the *Utilities Commission Act* and for the reasons attached as Appendix A to this order, the British Columbia Utilities Commission orders as follows:

1. FortisBC Energy Inc.'s proposed depreciation and net salvage rate changes, which result in a reduction to the composite depreciation rate from 3.19 percent to 3.06 percent and an increase to the composite net salvage rate from 0.44 percent to 0.64 percent, are approved, effective January 1, 2017.

2. FortisBC Energy Inc. is directed to include as part of its next Depreciation Study an analysis of the costs and benefits of converting from the Average Service Life group depreciation method to the Equal Life Group depreciation method, including calculations of the rate impact. FEI is also directed to include a discussion of the group depreciation method used by each of the major regulated gas utilities in Canada.

DATED at the City of Vancouver, in the Province of British Columbia, this 28th day of July 2016.

BY ORDER

Original signed by:

D. A. Cote
Commissioner

Attachment

FortisBC Energy Inc.
Proposal for Depreciation and Net Salvage Rate Changes

REASONS FOR DECISION

1.0 INTRODUCTION

1.1 Background and approvals sought

On September 3, 2015, FortisBC Energy Inc. (FEI or the Company) filed its Annual Review for 2016 Delivery Rates application. As part of this application, FEI filed an updated Depreciation Study based on FEI's gas plant-in-service as of December 31, 2014. Consistent with FEI's previous depreciation studies, FEI contracted Gannett Fleming Valuation and Rate Consultants Inc. (Gannett Fleming) to perform the review of FEI's depreciation and net salvage rates. Based on the Depreciation Study recommendations, FEI requested approval to decrease the average composite depreciation rate from 3.19 percent to 3.06 percent and to increase the composite net salvage rate from 0.44 percent to 0.64 percent. The overall impact of the proposed changes, including the changes to the Contribution in Aid of Construction (CIAC) amortization rate, was a net increase in depreciation and amortization expense for 2016 of $5 million compared to 2015.[1]

Pursuant to Order G-193-15 regarding the FEI Annual Review of 2016 Delivery Rates Application, issued on December 7, 2015, the Commission ordered the following:

> FEI's requested changes to depreciation and net salvage rates are not approved. FEI is directed to maintain existing depreciation and net salvage rates until otherwise directed by the Commission. FEI is further directed to submit additional information and analysis on depreciation and net salvage rate changes, as outlined in the Reasons for Decision to follow, by February 29, 2016.

In the Reasons for Decision accompanying Order G-193-15 issued on December 21, 2015 (2016 Annual Review Reasons for Decision), the Commission provided the following rationale for its request for additional information and analysis:

> Based on our review of the evidence collected in this proceeding, the Panel finds that certain issues have not been sufficiently addressed and as a result, we are unable to make a determination on whether the proposed depreciation rate changes are appropriate. Of particular concern is the number of instances where Gannett Fleming has recommended changes in depreciation rates which do not appear to be supported by evidence.[2]

Accordingly, the Commission directed FEI to respond to a number of questions related to the proposed changes to certain asset classes' average service lives and how these proposed changes relate to the recent history of net asset losses experienced by FEI. The Commission also requested an explanation as to when Gannett Fleming expects the trend of net asset losses experienced in a number of FEI's asset classes to reverse to a trend of net gains, and requested a jurisdictional comparison of FEI's depreciation rates to other large Canadian gas utilities.[3]

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[1] Exhibit A2-1, pp. 112–113, 116.
[2] 2016 Annual Review Reasons for Decision, p. 12.
[3] Ibid., pp. 12–14.

With regards to FEI's request for net salvage rate changes, the Commission stated the following:

> The Panel notes that the recommendations for net salvage rate changes are also based on the findings of the depreciation study and that the findings on depreciation and net salvage rates are likely interconnected. **Therefore, the Panel directs FEI to maintain net salvage rates at existing rates until otherwise directed by the Commission.**[4]

On February 29, 2016, FEI filed the additional information and analysis requested by the Commission (Application). Included in the Application is additional background information on the depreciation methodology utilized by FEI as well as information on an alternative group depreciation methodology – the Equal Life Group (ELG) procedure.

1.2 Regulatory process

In accordance with Order G-41-16 issued on March 24, 2016, the Panel established the Regulatory Timetable for review of the Application providing for one round of information requests (IRs) followed by submissions from FEI and registered interveners on further process. By Order G-65-16 issued on May 11, 2016, and in consideration of the evidence and parties' submissions on further process, the Panel determined it appropriate to proceed directly to written final arguments, culminating with FEI's reply argument to be filed no later than June 17, 2016.

The British Columbia Old Age Pensioners' Organization *et al.* (BCOAPO) is the sole intervener registered in this proceeding.

2.0 ISSUES

In the Application, FEI, with the assistance of Gannett Fleming, responded to the Commission's questions raised in the 2016 Annual Review Reasons for Decision. These questions and a summary of FEI's responses are provided in the following sections.

2.1 Commission questions raised in the 2016 Annual Review Reasons for Decision

QUESTION #1 (ASSET CLASS - DISTRIBUTION MAINS - 475):

(a) What specific information/data led Gannett Fleming to recommend an increase to this asset class's average service life?

(b) How is the recommended increase to the average service life of Asset Class 475 consistent with the past twelve years of historical net asset losses experienced in this asset class?

(c) Please explain how the recommendations and findings in the depreciation study to decrease the depreciation rate align with the increased retirement activities described in response to BCUC IR 1.28.1 of this proceeding.

QUESTION #2 (ASSET CLASS 465 – TRANSMISSION PIPELINE):

(a) How does Gannett Fleming's recommendation to maintain the existing depreciation rate correlate to the past twelve years of historical net asset losses experienced in this asset class?

[4] Ibid., p. 12.

(b) Please explain how the recommendations and findings in the depreciation study regarding this asset class' depreciation rate aligns with the increased retirement costs described in response to BCUC IR 1.28.1.

QUESTION #3 (ASSET CLASSES 467 – MEASURING AND REGULATING EQUIPMENT – TRANSMISSION PLANT AND 477 – MEASURING AND REGULATING EQUIPMENT – DISTRIBUTION PLANT):

(a) What specific information led to Gannett Fleming recommending an increase to these asset classes' average service lives?

(b) How is this recommendation consistent with the past twelve years of historical net asset losses experienced in these asset classes?

QUESTION #4:

For the five asset classes which have experienced the largest historical net losses since 2003 (Asset Classes 465, 473, 474, 475 and 478), does Gannett Fleming expect that at some point in the future the trend of net losses will reverse and that these asset classes will start exhibiting net gains? If yes, please explain when the net gains are expected to starting occurring. If not, please explain why not.

QUESTION #5:

Please compare the proposed depreciation rates for the following FEI asset classes to the depreciation rates for the same (or similar) asset classes of other large Canadian gas utilities:

- Asset Class 465 - TP Mains
- Asset Class 467 - TP Measuring & Regulating Equipment
- Asset Class 473 – DS Services
- Asset Class 475 – DS Maintenance
- Asset Class 477 - DS Measuring and Regulating Equipment
- Asset Class 478 – DS Meters

2.2 FEI responses to Commission questions

Commission Questions No. 1 through No. 3 sought clarification on the reasonableness of Gannett Fleming's recommended changes to the average service lives of Asset Class 475 – Distribution Mains; Asset Class 465 – Transmission Pipeline; Asset Class 467 – Transmission Plant Measuring and Regulating Equipment; and Asset Class 477 – Distribution Plant Measuring and Regulating Equipment, when considering these asset classes' history of net asset losses.

Gannett Fleming explains that the historical net asset losses are expected due to FEI's usage of the average service life (ASL) group depreciation method.[5] Under the ASL depreciation method, all assets in a fixed asset account, such as Asset Class 475 – Distribution Mains, are depreciated and recovered over the account's average service life. The average service life is determined through the Depreciation Study using historical actual retirement records.[6] In the case of FEI's asset class 475, Gannett Fleming determined the average service life to

[5] Exhibit B-1, p. 8.
[6] Ibid., p. 3.

be 64 years, meaning that asset retirements are expected to occur starting at year zero and continuing well past the average service life of 64 years.[7]

Gannett Fleming states the primary reason the asset classes referenced above are experiencing significant asset losses is due to the assets in these accounts being relatively young on average. For example, the average year of asset additions in Account 475 is 1995, which means the average age of the assets in this asset class is approximately 20 years, well below the asset class's average service life of 64 years. As this account ages and retirements begin to occur at ages greater than 64 years, asset gains will occur. Gannett Fleming submits that this is the "defining characteristic of the ASL procedure."[8] The ASL procedure will result in an under recovery of depreciation (i.e. a "loss") for each asset that is retired before the average service life of the asset account and will result in an over recovery of depreciation (i.e. a "gain") for each asset that is retired after the average service life. The only time that an under or over recovery of depreciation will not occur is when a retirement occurs at the exact average service life (i.e. age 64 in the case of Asset Class 475).[9]

In response to Commission Question No. 4, Gannett Fleming confirms that the ASL method will record losses on assets retired prior to the average service life of the asset group and gains on assets retired later, but notes a number of intervening factors can affect the calculation of gains and losses. Gannett Fleming submits: "it should be recognized that the continual addition of assets will result in 'losses' continuing to outpace 'gains'. In particular, due to the impacts of inflation on new capital investment, the under recovery of depreciation on short-lived assets will defer the ability of the utility to recognize a gain."[10]

Gannett Fleming provides a peer analysis comparison in Attachment 4 to the Application. This peer analysis includes the following Canadian gas utilities: ATCO Gas, Centra Gas Manitoba, Enbridge Gas Distribution, AltaGas, Saskatchewan Energy, and ATCO Pipelines. In some cases, the peer utilities' asset classes have shorter average services lives and in some cases, longer average service lives.

2.3 ASL versus ELG depreciation methodologies

In the Application, Gannett Fleming provides a discussion of the Equal Life Group procedure, which is the other group depreciation method commonly used by Canadian and North American utilities. Gannett Fleming submits that the ELG procedure is considered "to more accurately estimate the actual consumption of a company's fixed assets" and is considered to be "the most mathematically correct procedure for capital recovery by depreciation specialists."[11]

In Gannett Fleming's view, the use of the ELG procedure would "significantly reduce 'losses' and 'gains' compared to the 'losses' and 'gains' that result from the current use of the ASL procedure."[12] This occurs because under the ELG procedure, assets are grouped based on the estimated life of each group; therefore, each asset in a fixed asset account is depreciated over the service life of the specific ELG. Both the ASL and ELG procedures result in full recovery of the costs of the assets over the life of the fixed asset account; however, the ELG procedure is intended to reflect the expected physical retirement of the assets in each year which is why the occurrence of assets losses and gains is much lower.[13]

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[7] Exhibit B-2, BCUC IR 1.1, 1.2.
[8] Exhibit B-1, p. 8.
[9] Ibid., p. 5.
[10] Ibid.
[11] Exhibit B-1, p. 3.
[12] Ibid., p. 8.
[13] Ibid., pp. 4-5.

FEI submits that a number of system changes would be required to convert from the ASL procedure to the ELG procedure. These include changes to FEI's SAP accounting system and day-to-day accounting within SAP, changes to the processes and procedures used to record retirement transactions, and changes to quarterly and year end processes for financial reporting purposes. FEI further submits a "detailed assessment would be required to validate all necessary requirements before proceeding to implementation."[14] FEI estimates the system changes required to implement the ELG procedure could cost up to $500 thousand.[15]

The conversion to the ELG procedure would not result in any additional costs to prepare the depreciation studies due to the similarity of the work required to produce the depreciation rates; however, in Gannett Fleming's experience, the regulatory burden generally increases in the first application where the ELG procedure is used which often results in an increase in regulatory costs.[16] Additionally, the short term impact of adopting the ELG method from a ratepayer perspective would be an increase in depreciation expense; however, over the life of the asset, the depreciation expense is expected to be the same under either method.[17]

FEI provides the revenue requirement and rate impact of adopting the ELG method. For years 2017, 2018 and 2019, use of the ELG method compared to the ASL method results in approximately a 12 percent higher revenue requirement impact due to higher annual depreciation expense, and a delivery rate increase in 2017 of 5 percent. In consideration of the rate impact, the additional complexity and cost, and the fact that the ASL method is used by the other major utilities in BC, FEI does not recommend the adoption of the ELG method at this time.[18]

3.0 POSITIONS OF THE PARTIES

FEI submits its proposed depreciation and net salvage rates, as recommended by Gannett Fleming, are based on a "sound and acceptable methodology that is in use by the other major utilities in B.C. and in other jurisdictions."[19] Further, while questions were raised regarding the basis for various recommendations, "there were no issues raised with Gannett Fleming's expertise, the depreciation method used, or the reasoning and analysis employed." FEI therefore submits that "based on the evidence in this proceeding, the updated depreciation and net salvage rates proposed by FEI are just and reasonable and should be approved as filed."[20]

With regards to the average service life recommendations made by Gannett Fleming in the Depreciation Study, FEI submits the recommendations are "consistent with the experience of historical losses and have been appropriately determined for the purpose of setting its depreciation rates."[21]

FEI does not recommend adopting the ELG method at this time and asserts "the rate impact and additional complexity and cost of the ELG procedure far outweigh any perceived benefit of reducing asset losses as experienced under the ASL procedure."[22]

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[14] Exhibit B-2, BCUC IR 2.1.
[15] Ibid., BCUC IR 2.1.1.
[16] Ibid., BCUC IR 2.1.
[17] Ibid., BCUC IR 2.3.
[18] Ibid., BCUC IR 2.3.1.
[19] FEI Final Argument, p. 10.
[20] Ibid., p. 11.
[21] Ibid., p. 6.
[22] Ibid., p. 8.

BCOAPO agrees that the Application and IR responses address the Commission's questions raised in the 2016 Annual Review Reasons for Decision and is satisfied the depreciation and net salvage rates proposed by FEI are properly based on the depreciation study conducted by Gannett Fleming.[23] However, BCOAPO submits that FEI's current performance-based ratemaking plan (PBR Plan) was structured based on the "state of affairs" that existed in 2013-2014 and argues "factors that impact FEI's profitability that do not relate to efficiency gains should not be altered mid-PBR in a way that result in a benefit to FEI and a corresponding detriment to FEI's ratepayers."[24] In BCOAPO's view, "the proposed changes to net salvage do precisely this." BCOAPO therefore submits the "proposed changes to FEI's net salvage (and depreciation) rates should be approved but should only be effective starting in 2019 at the end of the PBR term."[25]

FEI responds that "BCOAPO's position is mistaken and unreasonable for a number of reasons." Firstly, the proposed changes to depreciation and net salvage rates will have no impact on other components of the PBR Plan, as these items are treated as flow-through expenses under the PBR Plan and are "akin to the annual changes to the other costs that flow outside the PBR formula, such as non-formula O&M [operations and maintenance] expenses." Secondly, FEI submits the proposed changes will have no impact on the Company's ability to earn its allowed return on equity due to these items' classification as flow-through expenses. This means that updating the depreciation and net salvage rates have no impact on the efficiency incentives under the PBR plan.[26]

FEI further submits that updating depreciation and net salvage rates every three to five years is essential to ensure that rates properly reflect the useful lives of FEI's assets and a fair allocation and recovery of depreciation expense between current and future ratepayers. FEI points out that if the updated depreciation and net salvage rates are postponed to 2019, the proposed rates will already be in need of updating at that time and may no longer be appropriate to implement.[27]

Commission determination

With respect to FEI's explanations provided in the Application to support the depreciation rate changes proposed by Gannett Fleming, the Panel accepts the responses to the Commission's questions as reasonable and finds the responses adequately address the issues raised by the Commission in the 2016 Annual Review Reasons for Decision.

The Panel acknowledges the following based on review of the information contained in the Application and in IR responses:

- there is an ongoing need to adjust depreciation rates to reflect adjustments to the estimated service lives of FEI's assets which may range from less than one year to over 100 years;
- as a result of changes to industry standards and technology and in some cases lack of statistical data, changes to average service lives may be required to correct inaccuracies in previous depreciation studies, such as in the case of Asset Class 467.20 – Measuring and Regulating Equipment;[28] and

[23] BCOAPO Final Argument, p. 4.
[24] Ibid.
[25] Ibid., pp. 4-5.
[26] FEI Reply Argument, pp. 1-2.
[27] Ibid., p. 3.
[28] Exhibit B-2, BCUC IR 1.11.

- the process of using statistical sampling and other means of research as employed by FEI's external consultants to evaluate the actual retirement rates of assets against the Company's estimates as the basis from which adjustments to depreciation rates may be determined is a reasonable and commonly used practice.

The Panel concludes from the foregoing that there is a need to adjust depreciation rates at regular intervals as the incidence of retirements is updated and the current proposal is consistent with this.

With regards to the usage of the ASL procedure versus the ELG procedure, the Panel accepts FEI's position that adoption of the ELG method is not appropriate at this time. Although the ELG method would reduce the incidence of losses arising from the early retirement of assets, we observe the following:

- the comparative assessment of the two methods set out in FEI's responses to Commission IRs do not yield sufficiently different results to conclude the ASL method should not be continued at this time; and
- the costs associated with system changes and the impact on ratepayers over the next three years of adopting the ELG method is significant and, in the Panel's view, have not been justified.

In accepting FEI's recommendation not to adopt the ELG method at this time, the Panel sees potential merit to the future adoption of the ELG method, particularly given Gannett Fleming's assertion that this procedure is considered to "more accurately estimate the actual consumption of a company's fixed assets"[29] and will significantly reduce the recording of asset losses and gains. In order to adequately understand and assess the short term and long term benefits and costs of adopting the ELG method, the Panel requires further information beyond FEI's responses to Commission IRs in this proceeding. **Therefore, the Panel directs FEI to provide as part of its next Depreciation Study an analysis of the costs and benefits of converting from the Average Service Life group depreciation method to the Equal Life Group depreciation method, including calculations of the rate impact. FEI is also directed to include a discussion of the group depreciation method used by each of the major regulated gas utilities in Canada.**

With respect to BCOAPO's statement that FEI's proposed depreciation and net salvage rate changes should not be implemented until after the PBR term in 2019, the Panel disagrees. Changes to depreciation and net salvage rates are treated as flow-through items under the PBR and thus have no impact on FEI's formula-driven expenditures or on the annual earnings sharing mechanism. Further, deferring the adjustment of rates until a later date would cause FEI to continue to use depreciation and net salvage rates which do not reflect its current circumstances. **Accordingly, FEI's proposed depreciation and net salvage rate changes, which result in a reduction to the composite deprecation rate from 3.19 percent to 3.06 percent and an increase to the composite net salvage rate from 0.44 percent to 0.64 percent, are approved, effective January 1, 2017.**

[29] Exhibit B-1, p. 3.