



Diane Roy
Director, Regulatory Services

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (604) 576-7349
Cell: (604) 908-2790
Fax: (604) 576-7074
Email: diane.roy@fortisbc.com
www.fortisbc.com

May 4, 2016

British Columbia Public Interest Advocacy Centre
Suite 208 – 1090 West Pender Street
Vancouver, B.C.
V6E 2N7

Attention: Ms. Tannis Braithwaite, Executive Director

Dear Ms. Braithwaite:

Re: FortisBC Energy Inc. (FEI)

Project No. 3698871

Proposal for Depreciation and Net Salvage Rate Changes (the Application)

Response to the British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre *et al.* (BCOAPO) Information Request (IR) No. 1

On February 29, 2016, FEI filed the Application referenced above. In accordance with Commission Order G-41-16 setting out the Regulatory Timetable for the review of the Application, FEI respectfully submits the attached response to BCOAPO IR No. 1.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

Attachments

Cc (email only): Commission Secretary
Registered Parties

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 1

1.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Page 3 of 18

Preamble: On page 4 of 18 (PDF page 6 of 76) GF states:

The depreciation analyst, through analysis of historical actual retirement records (assuming a significant and accurate quantum of historical records are available), is able to ascertain the expected statistical service life of each asset in a fixed asset account. **Thus a depreciation analyst has a high degree of confidence that the statistical dispersion will accurately estimate the actual retirement of the fixed asset account.** Based on the analysis, a depreciation analyst is able to determine that, for example, for all vehicles capitalized in Year 1 approximately 1% of those vehicles will be estimated to retire in that same year. These vehicles would typically retire from collisions or catastrophic events resulting in a very short service life. Similarly, determinations of vehicle retirements at each successive year can be statistically determined until the complete retirement of all vehicles comprising the original capitalization in year 1. The last vehicle retired, say in year 20, would typically retire due to age resulting in a very long service life. (Emphasis Added)

BCOAPO et al. requires information to assess how GF can state it has a high degree of confidence.

1.1 Please fully discuss and describe all statistical analyses and tests of statistical significance that is done by GF for each of the accounts in the Net Salvage analysis that supports the assertion that there is a "high degree of confidence that the statistical dispersion will accurately estimate the actual retirement of the fixed asset account" and demonstrate that the results are statistically significant.

Response:

The following response has been prepared by Gannett Fleming.

The quoted section from page 3 (not page 4) of Exhibit B-1 was not describing the net salvage analysis, but rather the determination of the life estimates (the section heading is Historical Life Analysis).

A depreciation study requires selection of two separate and distinct parameters, a life parameter (i.e., an Iowa Curve selection and an average service life selection which combined reflects a life parameter) and a net salvage parameter (i.e., gross salvage, which reflects funds into the company, and cost of retirement, which reflects funds out of the company, which combined reflects a net salvage parameter). The quote in the preamble relates to the determination of the life parameter. However, the actual question references the "Net Salvage analysis". In providing this response, Gannett Fleming has assumed that the question is actually referring to the life parameter determination and has responded to that question below.

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 2

As detailed in the preamble, a depreciation analyst analyses all historical actual retirement records which include the original cost, the original capitalization year (i.e., vintage year), and the retirement year (i.e., transaction year). With a vintage year and a transaction year, an actual realized service life for each retirement can be ascertained. At each applicable retirement age, the depreciation analyst is able to determine the aged original investment (i.e., exposures) applicable to the aged retirement. A retirement ratio is then calculated (i.e., aged retirement / applicable exposures), from which a survival ratio can then be calculated (i.e., 1 – retirement ratio). Assuming a significant and accurate quantum of historical records is available, a detailed historical record of actual realized life for each aged historical retirement is ascertained. Standardized Iowa curves (please refer to BCUC IR 1.5.2) can then be statistically fit through a Residual Measure mechanism. This Residual Measure is based on a least squares solution of the differences between the stub curve (or original data points) and smooth survivor curve which also requires a balancing of the differences above and below the stub curve. A visual analysis is also then performed to ensure an accurate fit of the Iowa Curve and average service life to the stub curve or observed data points.

The final step is a confirmation from the company's operational and engineering groups that the recommended life parameters are indicative of the future expectations for the equipment in the account under analysis.

The combination of these two steps ensures that the depreciation analyst has a high degree of confidence that the statistical dispersion will accurately estimate the actual retirement of the fixed asset account.

- 1.2 In the response to 1.1, above, please include the supporting data and the results of the statistical analysis and tests of statistical significance that was done by GF for each of the accounts in the Net Salvage study.

Response:

The following response has been prepared by Gannett Fleming.

Please refer to Section V of the Depreciation Study (Exhibit A2-2).

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 3

2.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Page 5 of 18

2.1 GF discusses the ASL methodology compared to the ELG Methodology. Please fully explain which methodology is used by FEI in determining depreciation expense for each of the accounts in the Net Salvage Study.

Response:

The following response has been prepared by Gannett Fleming.

As stated in the Deprecation Study (Exhibit A2-2) at page vi: "The depreciation rates are based on the straight line method using the average service life ("ASL") procedure and were applied on a remaining life basis." This statement applies to all of the accounts that have net salvage recommendations.

2.2 Please confirm that GF believes that the ELG method is superior to the ASL method. If not confirmed, please fully explain.

Response:

The following response has been prepared by Gannett Fleming.

Confirmed.

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 4

3.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Page 5 of 18

3.1 GF discusses Under Recovery (Loss) / Over Recovery (Gain). Please confirm that if the average service life is correct, over time any under recoveries in the early years will be offset by over recoveries in the later years. If not confirmed, please fully explain.

Response:

The following response has been prepared by Gannett Fleming.

Confirmed. However, as stated on page 8 of Exhibit B-1, 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.

3.2 If the response to 3.1, above is not confirmed, please fully explain how the average service lives could be correct.

Response:

The response to BCOAPO IR 1.3.1 was confirmed.

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 5

4.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Page 6 and 7 of 18

4.1 In the first bullet in response to Question 1 (a), GF mentions information provided by FEI. Please provide all information, directions, memos, or any other communication provided to GF from FEI.

Response:

The referenced first bullet in response to Question 1 (a) states that "FEI provided Gannett Fleming with updated historical aged retirements from 2010 to 2014 which provided a complete aged retirement history for this asset class from the first retirement in 1963 to 2014, for a total of almost \$46M in assets."

This is true for the specific asset account 475 and also for the Depreciation Study more generally; that FEI provided Gannett Fleming with all asset record data for the period 2010 to 2014. This information is already reflected in the Depreciation Study (Exhibit A2-2) and can be found in the schedules within the study.

4.2 At the top of page 7, FEI refers to statistical analysis. Please provide all working papers, and supporting documents, of the statistical analysis.

Response:

The following response has been prepared by Gannett Fleming.

Please refer to Section V of the filed Depreciation Study (Exhibit A2-2) for the statistical analysis for all accounts. Specifically with respect to account 475 which was being discussed at the top of page 7 of Exhibit B-1, please refer to page V-37 through V-39 of Exhibit A2-2.

4.3 In the second complete bullet on page 7, GF mentions discussions with FEI operating and engineering staff. Please provide copies of all interview notes, meeting notes, meeting minutes, meeting agendas, questionnaires, or any other documentation of the meetings discussed.

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 6

1 **Response:**

2 The following response has been prepared by Gannett Fleming.

3 Meetings regarding account 475 included a discussion of Gannett Fleming's recommendations
4 and confirmation from FEI personnel of the facts noted in the referenced paragraph. The results
5 of the meeting are reported in the Depreciation Study and the minutes of the meeting regarding
6 Distribution Mains (account 475) are provided in Attachment 4.3.

7

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 7

5.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Page 8 of 18

5.1 In the third paragraph, GF states that the majority of retirements have occurred prior to the average service life of 64 years. Please provide all supporting analysis in support of the GF assertions.

Response:

The following response has been prepared by Gannett Fleming.

Please refer to page V-38 and V-39 of Exhibit A2-2. Retirements are indicated at each age from age 0 to age 74.5. Retirements up to age 63.5 total \$45.9M with a total actual retirement of \$46M indicating 99.7% of the total actual retirement activity has occurred prior to the average service life of 64 years.

<p style="text-align: center;">FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)</p>	<p style="text-align: center;">Submission Date: May 4, 2016</p>
<p style="text-align: center;">Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1</p>	<p style="text-align: center;">Page 8</p>

6.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Page 13 of 18

6.1 In response to Question 3 (b), in the first paragraph on page 13, GF states that the assets are young on average. Please provide all detailed working papers in support of the assertions.

Response:

The following response has been prepared by Gannett Fleming.

Question 3 (b) was related to two accounts - 467.10 Measuring and Regulating Additions – Transmission Plant and 477.10 Measuring and Regulating Additions – Distribution Plant.

Please refer to page V-23 and V-24 of Exhibit A2-2 for the service life statistic tables for account 467.10, which has a 36 year service life recommendation. For this account, retirements are indicated from age 0 to age 42.5. Retirements up to age 35.5 total \$6.838M and the total actual retirement to the end of 2014 is \$6.859M, indicating that 99.7% of the total actual retirement activity has occurred prior to the average service life of 36 years.

Please refer to page V-41 and V-42 of Exhibit A2-2 for the service life statistic tables for account 477.10 which has a 30 year service life recommendation. For this account, retirements are indicated from age 0 to age 50.5. Retirements up to age 29.5 total \$14.900M and the total actual retirement to the end of 2014 is \$15.837M, indicating that 94.1% of the total actual retirement activity has occurred prior to the average service life of 30 years.

6.2 In the third paragraph, GF indicates that losses will be larger than gains due to inflation. Please fully explain why the reverse is not true, that inflation would make later retirements more cost effective.

Response:

The following response has been prepared by Gannett Fleming.

Gannett Fleming does not understand how “inflation would make later retirements more cost effective”. The paragraph referenced on page 13 of Exhibit B-1 refers to how the magnitude of gains on assets that survive beyond the average service life will be smaller than the losses on similar assets that retire before the average service life, because the original cost base of older assets is smaller than for newer assets due to inflation. In other words, due to inflation the same types of assets cost more today than they did, say, in the 1950s, such that gains or losses on an asset added in the 1950s will be much smaller than gains or losses on a similar asset added



FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 9

1 today. The referenced paragraph does not refer to the incremental cost of retiring assets, which
2 may be what is being referred to in the question.

3

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 10

7.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Page 13 of 18

Preamble: GF does not appear to respond to Question 5, but rather provides a response from the 2012-2013 RRA.

7.1 Please provide a chart similar to the charts on page 16 of 18 (PDF 19 of 73) for each of the accounts in the net salvage study. In the response, please provide the supporting data, underlying calculations, and underlying assumptions.

Response:

The following response has been prepared by Gannett Fleming.

There are 33 accounts for which Gannett Fleming is recommending net salvage rates. To provide the requested information for each of these accounts would require a significant amount of time and effort and would provide no additional benefit. Please refer to the response to Question #4 in Exhibit B-1, Gannett Fleming Additional Evidence. The original chart reference was provided to show an example of the expected effect that would be applicable to all accounts. As stated, "(t)he response provided to BCUC IR 2.74.13 was in relation to Account 475 but is indicative of all the accounts." Each account would show the same effect, i.e., that losses prior to the average service are offset by gains after the average service life for every account.

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 11

8.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Page 17 of 18

8.1 In response to Question 5, GF discusses the difference between the ASL and ELG methods. Please provide the service lives, depreciation rates, and net salvage rate for each account in the net salvage study, for each of the ELG method, and the ASL method, along with the supporting calculations and assumptions.

Response:

The following response has been prepared by Gannett Fleming.

The depreciation parameters of life and net salvage remain unchanged whether using an ELG procedure or an ASL procedure and can therefore be found in Exhibit A2-2. The depreciation rates and net salvage rates under the ASL method have been provided in Exhibit A2-1 Tables 12-2 and 12-3. The depreciation rates and net salvage rates under the ELG method have been prepared on a preliminary basis only to respond to this question and also to respond to BCUC IR 1.2.3.21 and are provided in the table below.

ACCOUNT	ACCOUNT DESCRIPTION	Life ELG *	Net Salvage ELG *
INTANGIBLE PLANT			
401.01	Franchises and Consents	3.01	0.00
402.01	Computer Software Application 8 years	12.50	0.00
402.02	Computer Software Application 5 years	20.00	0.00
402.03	Intangible Plant	2.08	0.00
402.11	Intangible Plant	2.50	0.00
TOTAL INTANGIBLE PLANT			
MANUFACTURING PLANT			
432.00	Mfg. Gas Structures	2.70	0.00
433.00	Mfg. Gas Equipment	4.88	0.00
434.00	Mfg. Gas Holders	2.47	0.00
436.00	Mfg. Gas Compressor Equipment	3.87	0.00
437.00	Mfg. Gas Meas. & Reg. Equipment	3.21	0.00
TOTAL MANUFACTURING PLANT			

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 12

LNG PLANT

442.00 LNG Plant - Structures	3.89	0.43
442.01 LNG Plant - Structures Mt. Hayes	4.47	0.51
443.00 LNG Plant - Equipment	2.20	0.52
443.05 LNG Plant - Equipment Mt. Hayes	1.68	0.36
448.10 LNG Plant - Piping	2.85	0.31
448.20 LNG Plant - Pre-treatment	4.47	0.51
448.30 LNG Plant - Liquefaction Equipment	2.85	0.62
448.40 LNG Plant - Send Out Equipment	3.22	0.35
448.50 LNG Plant - Sub-Station and Electrical	3.22	0.69
448.60 LNG Plant - Control Room	7.22	0.00
449.00 LNG Plant - Other Equipment	4.06	0.41
449.01 LNG Plant - Other Equipment Mt. Hayes	3.37	0.34
465.30 Mt. Hayes - Mains	1.51	0.32
467.00 Mt. Hayes - Meas. & Reg. Equipment	3.65	0.29

TOTAL LNG PLANT

TRANSMISSION PLANT

462.00 Trans. Plant - Compressor Structures	3.67	0.03
463.00 Trans. Plant - Meas. & Reg. Structures	2.72	0.60
464.00 Trans. Plant - Other Structures	3.86	0.22
465.00 Trans. Plant - Trans. Pipeline	1.68	0.40
465.11 Intermediate Pipe - Whistler	1.77	0.38
466.00 Trans. Plant - Compressor Equipment	3.08	-0.08
467.10 Trans. Plant - Meas. & Reg. Equipment	3.08	0.26
467.20 Trans. Plant - Telemetry Equipment	12.58	0.00
467.31 Intermed. Pressure - Meas. & Reg. Equipment - Whis	3.51	0.29
468.00 Trans. Plant - Communications Equipment	1.33	0.00

TOTAL TRANSMISSION PLANT

DISTRIBUTION PLANT

472.00 Dist. Systems - Structures	3.20	0.38
473.00 Dist. Systems - Services	3.12	1.98
474.00 Dist. Systems - Meters/Reg. Installations	6.71	1.76
474.02 New Meter Installations	4.55	0.00
475.00 Dist. Systems - Mains	1.80	0.49
476.00 Dist. Systems - NGV Fuel Equipment	-9.30	0.00
477.10 Dist. Systems - Meas. & Reg. Additions	3.72	0.49
477.20 Dist. Systems - Telemetry	5.27	0.54
477.30 Dist. Systems - Meas. & Reg. Equipment	-9.48	0.00
478.10 Dist. Systems - Meters	6.62	0.00
478.20 Dist. Systems - Instruments	3.04	0.00

TOTAL DISTRIBUTION PLANT

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 13

BIO GAS

472.20 Bio Gas - Strct. & Improvements	4.54	0.46
474.10 Bio Gas Reg & Mtr Installations	8.20	2.08
475.10 Bio Gas Mains - Land	2.06	0.51
477.40 Bio Gas Meas & Reg	4.61	0.00
478.30 Bio Gas Meters	6.18	0.00
418.10 Bio Gas Purification Overhaul	5.00	0.00
418.20 Bio Gas Purification Upgrader	4.90	0.25
418.30 Bio Gas - Strct. & Improvements - Special Facilities	N/A **	N/A **
418.40 Bio Gas Reg & Mtr Installations - Special Facilities	N/A **	N/A **
418.50 Bio Gas Mains - Land - Special Facilities	N/A **	N/A **
418.60 Bio Gas Meas & Reg - Special Facilities	N/A **	N/A **
418.70 Bio Gas Meters - Special Facilities	N/A **	N/A **

TOTAL BIO GAS

NG FOR TRANSPORTATION

476.10 NG Transp - CNG Disp E	4.82	0.00
476.20 NG Transp - LNG Disp E	4.79	0.00
476.30 NG Transp - CNG Found	4.90	0.00
476.40 NG Transp - LNG Found	4.73	0.00
476.50 NG Transp - LNG Pumps	8.98	0.00
476.60 NG Transp - CNG Dehydr	4.95	0.00

TOTAL NG FOR TRANSPORTATION

GENERAL PLANT

482.10 General Plant - Structures (Frame)	6.05	0.00
482.20 General Plant - Structures (Masonry)	2.34	0.28
483.10 Computer Hardware	20.00	0.00
483.20 Computer Software 12.5%	12.50	0.00
483.30 Office Furniture and Equipment	6.67	0.00
483.40 Furniture	5.00	0.00
484.00 Vehicles	16.55	-1.14
485.10 Heavy Work Equipment	9.10	-0.72
485.20 Heavy Mobile Equipment	13.07	-2.91
486.00 Small Tools/Equipment	5.00	0.00
487.20 NGV Cylinders	6.67	0.00
488.10 Telephone Equipment	6.67	0.00
488.20 Radio Equipment	6.67	0.00

TOTAL GENERAL PLANT

Notes:

* Rates under the ELG procedure are preliminary rates

** Asset classes not assessed under the ELG procedure. ASL Rates based on current vintage theoretical values.

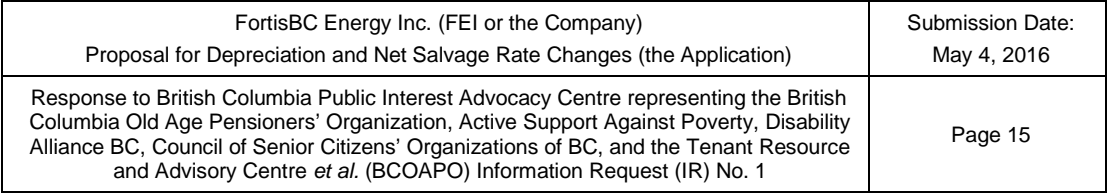
FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 14

1 8.2 Please provide an analysis of the impact on revenue requirement of adopting the
2 ELG method compared to the ASL method for each account.

3
4 **Response:**

5 Please refer to the response to BCUC IR 1.2.3.1.

6



9.1 Please provide the proposed survivor curves for each of the accounts in the net salvage study, along with a plot of the actual historic retirements.

Please refer to Section V of the Depreciation Study (Exhibit A2-2) for the survivor curves used in support of the depreciation life parameters. The survivor curves are not used in net salvage analysis.

Please also refer to the response to BCOAPO IR 1.1.1.

12

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 16

10.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Attachment 2, Group Accounting.

10.1 Starting on PDF page 35 of 73, GF discusses the nature of retirements, including, third party strikes, and forces of nature including storms and soil erosion, and other. Please provide an analysis of all retirements in the study splitting the number of retirements and cost of retirements for each year and each account by each of the causes listed by GF.

Response:

The requested analysis is often referred to as a "Cause of Retirement Study". Provided that the information is available, a Cause of Retirement Study would take a significant amount of time and effort and could not be completed within the time allotted for responding to IRs in this proceeding. Using account 473-00 - Distribution Services as an example, a Cause of Retirement Study would involve researching each individual asset retirement in each year from 1963 to 2014. This would then be replicated for each of the 68 asset accounts studied. Since FEI does not track the causes of plant retirements in its SAP system, FEI is not able to provide such information.

10.2 For the analysis provided in response to 10.1 above, please also provide the age of the asset retired for each cause.

Response:

Please refer to the response to BCOAPO IR 1.10.1.

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 17

11.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Attachment 3, Accumulated Depreciation Reserve True-up Process.

11.1 Please fully explain how this evidence relates to the determination of net salvage.

Response:

The following response has been prepared by Gannett Fleming.

The true-up process does not relate to the determination of net salvage parameters. Question #5 in the request for Additional Evidence asked for a comparison of FEI's depreciation rates to other large Canadian gas utilities. The true-up process is a major determinate in depreciation rate differences even when utility assets share the same life, and was provided to provide details on the relevance of the true-up process and its mechanics.

11.2 Please provide the actual reserve true up analysis, and related charts and working papers for each account included in this update.

Response:

The following response has been prepared by Gannett Fleming.

Please refer to Section VII of Exhibit A2-2.

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 18

12.0 Reference: Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Attachment 4, Peer IOWA Curves.

12.1 For each of the comparators, please indicate which are GF clients and which are not.

Response:

The following response has been prepared by Gannett Fleming.

All the comparators are Gannett Fleming clients.

12.2 If all comparators are GF clients, please fully explain why no other comparators were used.

Response:

The following response has been prepared by Gannett Fleming.

Knowledge of each company's operating environment, operating, capitalization, retirement, and accounting policies is imperative for proper comparison analysis as each can contribute to significant differences in the depreciation parameters. Without this detailed knowledge, proper comparisons cannot be done.

Further, there are only two utilities that are usually included in FEI's comparator group that are not included on the list - Union Gas and Gaz Metro. Union Gas is not a client of Gannett Fleming. While Gaz Metro is a client of Gannett Fleming, it was excluded from the comparison because of significant differences in accounting policies affecting the comparability of the data.

12.3 Please provide an updated table on PDF 73, including the FEI net salvage rates prior to any changes or updates.

Response:

The requested table is provided below, showing the original table and also including a column for FEI's approved 2009 net salvage rates.

FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)	Submission Date: May 4, 2016
Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1	Page 19

FORTISBC ENERGY - PEER NET SALVAGE PERCENTAGE ANALYSIS

ACCOUNT	ATCO GAS 2009	CENTRA GAS MANITOBA 2010	ENBRIDGE GAS DISTRIBUTION 2010	ALTAGAS 2012	SASK ENERGY 2005	ATCO PIPELINES 2011	FEI 2009	FEI 2014
Transmission Plant								
462.00 Trans. Plant - Compressor Structures						-5%	-5%	-3%
463.00 Trans. Plant - Meas. & Reg. Structures		0%		0%		-15%	-5%	-15%
464.00 Trans. Plant - Other Structures		0%				-20%	-5%	-5%
465.00 Trans. Plant - Trans. Pipeline		0%		-10%		-50%	-10%	-20%
466.00 Trans. Plant - Compressor Equipment						-5%	-10%	-2%
467.10 Trans. Plant - Meas. & Reg. Equipment		0%		-35%		-20%	-5%	-7%
467.30 Trans. Plant - Meas. & Reg. Equipment								-7%
Distribution Plant								
472.00 Dist. Systems - Structures	-40%	0%	20%	0%	-5%		-5%	-10%
473.00 Dist. Systems - Services	-100%	0%	-45%	-30%	-50%		-50%	-60%
474.00 Dist. Systems - Meters/Reg. Installations	-30%	0%		0%	0%		-10%	-20%
474.02 New Meter Installations	-20%							0%
475.00 Dist. Systems - Mains	-60%	0%	-85%/-90%	-10%	-10%		-20%	-25%
476.00 Dist. Systems - NGV Fuel Equipment							-20%	0%
477.10 Dist. Systems - Meas. & Reg. Additions	-40%	0%	0%		-5%		0%	-10%
477.20 Dist. Systems - Telemetry							0%	-5%
477.30 Dist. Systems - Meas. & Reg. Equipment							-5%	0%
478.10 Dist. Systems - Meters	0%	0%	5%	0%	0%		-5%	0%
478.20 Dist. Systems - Instruments								0%
General Plant								
482.10 General Plant - Structures (Frame)								0%
482.20 General Plant - Structures (Masonry)	0%	0%		0%	0%	-5%		-10%
483.10 Computer Hardware				0%				0%
483.20 Computer Software 12.5%								0%
483.30 Office Furniture and Equipment	0%	0%	0%	0%	0%			0%
483.40 Furniture			0%					0%
484.00 Vehicles	10%	10%	0%	25%	20%	15%	20%	4%
485.10 Heavy Work Equipment	25%	20%	25%	25%	20%	15%	15%	5%
485.20 Heavy Mobile Equipment							10%	15%
486.00 Small Tools/Equipment	0%	0%	0%	0%	0%			0%
487.20 NGV Cylinders								0%
488.10 Telephone Equipment								0%
488.20 Radio Equipment	0%		0%	0%		0%		0%

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12.4 Please confirm that, for each of the comparators, there is no more recent data. If not confirmed, please fully explain.

Response:

The following response has been prepared by Gannett Fleming.

Confirmed.

12.5 Please fully explain why each of the comparators was chosen, including the criteria for selection.

Response:

The following response has been prepared by Gannett Fleming.

Gannett Fleming selected only peer gas utilities for which Gannett Fleming had recently completed depreciation studies. Gannett Fleming understands each company's accounting policies, accounting systems and data retrieval processes, management and operational procedures, and the magnitude of large historic retirement events, etc. Gannett Fleming was able to use this knowledge to consider which utility accounts are comparable to FEI.

12.6 Please provide a list of all Gas Transmission and Distribution utilities in Canada, along with an explanation of why the utilities not in the exhibit were excluded from the list of comparators.

Response:

Please refer to the response to BCOAPO IR 1.12.2.

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<p style="text-align: center;">Response to British Columbia Public Interest Advocacy Centre representing the British Columbia Old Age Pensioners' Organization, Active Support Against Poverty, Disability Alliance BC, Council of Senior Citizens' Organizations of BC, and the Tenant Resource and Advisory Centre <i>et al.</i> (BCOAPO) Information Request (IR) No. 1</p>	<p style="text-align: center;">Page 21</p>

13.0 Reference: FEI Accounting Policy.

13.1 Please fully explain how FEI differentiates the cost of retirement and removal of an asset from the construction cost of the replacement of a new asset. In the response, please provide a detailed discussion of the criteria, allocations, and assumptions used in making the determination.

Response:

FEI considers the costs associated with retiring an asset as those incurred to remove or dismantle the asset. This is different than the costs associated with the acquisition and construction of a new asset.

Retirement activities and costs include those required to dispose of and remove the existing asset from the construction site. This includes expenditures for labour, material, contract services required to demolish, dismantle, tear down or otherwise remove the plant from service. Additionally, it includes the activities and costs to make the retired asset and equipment safe and to comply with any regulations (i.e., environment, municipal) if the asset is left in the ground. For example, for a mains replacement job, this involves sealing the ends of mains and segmenting a longer length of main into shorter segments.

To differentiate between the retirement and new construction costs, separate accounts and internal/service orders are used. One account and internal/service order is used for the costs associated with the retirement activities, while another separate account and internal/service order is used for the costs associated with the new asset.

13.2 Please fully explain if or how FEI differentiates between the historic cost of labour to install assets from the cost of the assets themselves in its accounting records, and in the retirement study.

Response:

FEI does not differentiate between the historic cost of labour to install assets from the cost of the assets themselves in its accounting records, and in the retirement study, as those costs together represent the total capital cost of installing that asset, and it is the total capital costs that is considered in the depreciation study.

<p style="text-align: center;">FortisBC Energy Inc. (FEI or the Company) Proposal for Depreciation and Net Salvage Rate Changes (the Application)</p>	<p style="text-align: center;">Submission Date: May 4, 2016</p>
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13.3 Please fully explain if any asset or equipment is refurbished and reused. If any is, please fully explain how GF takes such reuse into account in the preparation of its studies.

Response:

FEI's capitalization policy indicates that when an asset is refurbished and reused, and provided that the costs of refurbishment exceed 50 percent of the replacement cost of the new plant, the costs are capitalized as a new capital addition, with the costs of the addition being assigned an install year equal to the year of the addition. A partial retirement is recorded for the asset that was replaced or removed during the upgrade.

An example of such refurbishment activity is renewal work at a Gate/ District Station. The amount of work at a station depends on the nature of the deficiencies or concerns identified. Most often, deficiencies are addressed by the refurbishment of the station rather than complete replacement (i.e., FEI will replace components of the station but not the entire station). The new components will be recorded as new capital additions and the removed components will be retired. This is how the refurbishment is reflected in the data provided to Gannett Fleming and used in the depreciation study. Gannett Fleming advises that this procedure is commonly used by utilities throughout Canada, and has no or only minimal impact on the average service life characteristics.

13.4 Please fully explain how GF uses the FEI policy in determining the cost of retirement in comparison to the policy of other utilities used in Exhibit B-1, Gannett Fleming (GF) Additional Evidence, Attachment 4, Peer IOWA Curves.

Response:

The following response has been prepared by Gannett Fleming.

The actual cost of retirement is provided to Gannett Fleming as part of the initial data assembly. Gannett Fleming develops the costs of retirement as a percentage of the dollars retired and compares this result to the costs of retirement percentages as experienced by other peer utilities. As Gannett Fleming makes this comparison to a peer group for which Gannett Fleming has recently completed depreciation studies, Gannett Fleming has the background related to the cost of removal policies and practices of both FEI and the group to which the FEI results are being compared to.

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14.0 Reference: PBR incentives.

14.1 From FEI's perspectives, please fully explain any and all impacts of changes in depreciation rates and negative salvage rates will have on the Incentive properties of a PBR framework.

Response:

Since depreciation and net salvage rates are flowed through to customers outside of the PBR formula, changes to the depreciation and net salvage rates have no impact on the incentive properties of FEI's PBR Plan.

Attachment 4.3

FortisBC - Energy

Operational Interview Summary

Distribution Plant Mains & Services

March 9, 2015

Interviewed: Gary Johnson, Lee Robson

Purpose of Interview

The average service lives and net salvage estimates for Distribution Plant Mains and Services assets are directly dependent upon the accounting and reuse policies of the utility and regulatory jurisdiction. Additionally, the company practices with regard to reuse and future plans for deployment can have a significant impact on the life and net salvage estimates. As such, interviews are required to determine the reasonableness of using historic retirement and salvage indications for the estimation of the future retirement and salvage patterns.

Background of Mr. Johnson

- Position: Asset and Improvement Manager
- 9 year(s) in current position
- 35 years with company. Has been in distribution and transmission operations, engineering, governance and asset management.

Background of Mr. Robson

- Position: Sustainment Planning Manager
- 3 year(s) in current position
- 15 years with company (3 years in Asset Management (current area) and 2 years in IT (CCE Project), 7 years in Forecasting (Marketing Dept), 3 years in Compensation (HR Dept)

Mains:

- Under 300 PSI on Mainland, 450 PSI on Vancouver Island
- ¾" to 30" Diameter.
- Distinction between Transmission and Distribution is the related pressure.
- All distribution mains are approximately 50% steel composition (no bare steel) and 50% plastic (i.e. PE).

- Plastic
 - No ABS or PVC
 - No issues with plastic mains.
 - Majority of past retirements due to third party requirements.
 - Capacity issues are solved by supplemental installation rather than retirement activity.
- Steel
 - Steel replacements are usually replaced with plastic or insertion
 - Age is not an issue on retirements, usually more related to increased risk.
- General agreement that distribution mains are equal to transmission mains. Steel distribution may be like steel transmission in terms of degradation over time. Steel distribution has a lot more construction and third party damage.
- Large 1990 retirement due to purchase of lower mainland at NBV.
 - 1990 vintage was re-allocated to older vintages based on existing investment composition.
- General agreement on a 65 year average service life as a reasonable expectation.

Services:

- General agreement that Services Life < Mains Life.
- ¾" to 30" Diameter.

Net Salvage

- COR is generally considered incremental costs to installation activity.
- Large COR activity in Mains vintages 2012 and 2014 as a result of normal business activity and timing of completing the abandonment.
- General agreement that historical indications are indicative of the future.
- General agreement on a -25% Mains and -100% Services net salvage as reasonable expectations.