**Q. [ELG] – Please provide all notes, correspondence, documents, memos, etc. supporting the information presented on Exhibit R1 and Exhibit R2. Further, provide all underlying input, assumptions, considerations, and other material reviewed and/or relied upon in sufficient detail to permit replication of all values on Exhibit R2, with all calculations provided on electronic medium in Excel readable format with all formulas intact.**

A. Attachment A includes notes, correspondence and publically available documents used to support the information presented in Exhibit R1.

All underlying inputs, assumptions, consideration, and other material reviewed and/or relied upon to permit replication of all values in Exhibit R2 are provided in the Company evidence as referenced in the endnotes to Exhibit R2. The formulas used to calculate all values shown in Exhibit R2 are also provided in the endnotes to Exhibit R2.

Attachment B reproduces the calculation of Exhibit R2 in an Excel spreadsheet. An electronic version of Attachment B can be found in "CA-NP-621, Attachment B.xlsx" on Newfoundland Power's stranded website at the link ftp.nfpower.nf.ca.

**Exhibit R1 Supporting Documents**

Q. [Group Accounting] - Please provide a copy of all authoritative sources that demonstrates the appropriateness of employing an average group basis for the development of mortality characteristics (i.e., average service life and dispersion pattern), but the application of the resulting average group basis developed depreciation rate on an individual asset basis within the group.

A. This concept has been accepted in Canada by a number of regulatory bodies, including the following:

- British Columbia Utilities Commission in all of the filings of BC Hydro;
- The Saskatchewan Public Utilities Board in all of the filings of SaskPower; and
- The Nunavut Utilities Rates Review Council in a filing of Qulliq Energy Corporation.

In addition to the above regulatory reviews the application of the unit depreciation is specifically addressed in the International Financial Reporting Standards ("IFRS"), under International Accounting Standard ("IAS") 16, where it is stated:

> *"Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately" [IAS 16, paragraph 43]*
>
> *"An entity allocates the amount initially recognized in respect of an item of property plant and equipment to its significant parts and depreciates separately each such part."[IAS 16, paragraph 44]*

**PUB/MH II-6**

**Reference: PUB/MH I-9 (b)/ PUB/MPI I-75**

**The question requested the comparison with electric utilities in Canada including BC, Saskatchewan, Ontario and Quebec.**

**b) With respect to Saskatchewan's conversion to IFRS in 2011, please indicate how Sask Power accounts for depreciation, ALS or ELG?**

**ANSWER:**

Following their conversion to IFRS, SaskPower continues to account for depreciation using the Average Service Life method.

# Analysis of critical accounting policies and estimates

SaskPower's significant accounting policies are described in *Note 3* to the consolidated financial statements. Some of these policies involve accounting estimates that require management to make particularly subjective or complex judgments about matters that are inherently uncertain. Different conditions or assumptions regarding the estimates could result in materially different results being reported. Management has discussed the development and selection of these critical accounting policies with the Board of Directors and the external auditors.

The following section discusses the critical accounting estimates and assumptions that management has made and how they affect the amounts reported in the consolidated financial statements.

## Revenue

Electricity revenues are billed on a systematic basis over a monthly or quarterly period for all SaskPower customer classes. At the end of each month, SaskPower makes an estimate of the electricity delivered to its customers since their last billing date. The estimated unbilled revenue is based on several factors, including estimated consumption for each customer, applicable customer rates and the number of days between the last billing date and the end of the period. As at December 31, 2011, total Saskatchewan electricity sales of $1,667 million included $60 million of estimated unbilled revenue.

## Allowance for doubtful accounts

An allowance for doubtful accounts is calculated for both energy and non-energy sales. The allowance for doubtful accounts is reviewed quarterly based on an estimate of outstanding amounts that are considered uncollectible based on past experience. Historically, SaskPower has not written-off a significant portion of its accounts receivable balances.

## Depreciation

Property, plant and equipment represent 86% of total assets recognized on SaskPower's statement of financial position. Included in property, plant and equipment are the generation, transmission, distribution and other assets of SaskPower. Due to the size of SaskPower's property, plant and equipment, changes in estimated depreciation rates can have a significant impact on income.

Depreciation is recognized on a straight-line basis over the estimated useful life of each component of property, plant and equipment. Depreciation commences when the property, plant and equipment is ready for its intended use. The estimated useful life of property, plant and equipment is based on manufacturer's guidance, past experience and future expectations regarding the potential for technical obsolescence. The estimated useful lives of the components are based on formal depreciation studies that are performed every five years, with annual reviews for reasonableness. A one-year increase in the average estimated service life of each of the major asset classes of property, plant and equipment would result in a $16 million decrease to depreciation expense in the current year.

Following the completion of an external depreciation study, the estimated useful lives of certain asset components were changed. The change in estimate was applied prospectively, effective January 1, 2011. The impact of the change in estimated useful lives was an increase in depreciation expense of approximately $8 million in 2011. See *Note 3(e)* and *Note 8* to the consolidated financial statements for additional discussion of SaskPower's depreciation expense.

## Provisions

A provision is recognized if, as a result of a past event, SaskPower has a present legal or constructive obligation that can be estimated reliably. It must also be probable that an outflow of economic benefits will be required to settle the obligation, the timing or amount of which is uncertain. Provisions are determined by discounting the expected future cash flows at a rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The unwinding of the discount on provisions is recognized in profit or loss as a finance expense.

### Decommissioning provisions

A decommissioning provision is a legal or constructive obligation associated with the decommissioning of a long-lived asset. SaskPower recognizes decommissioning provisions in the period they are incurred if a reasonable estimate of fair value (net present value) can be determined. Our company recognizes provisions to decommission coal, natural gas, cogeneration and wind generation facilities in the period in which the facility is commissioned. SaskPower also recognizes provisions for the decommissioning of assets containing polychlorinated biphenyls (PCBs) in excess of existing federal regulations.

(2)

**Mugford, Ralph**

**From:** Byard, Andrew [Andrew.Byard@AltaLink.ca]
**Sent:** December 11, 2012 2:28 PM
**To:** Mugford, Ralph
**Cc:** Storer, Jeremy
**Subject:** RE: Depreciation Methodology Used By Your Utility

Hi Ralph,

AltaLink uses the ELG procedure to calculate depreciation.

Here is a quote from our latest filing:

The depreciation accrual rates and accrued depreciation were calculated using the straight line method, the whole life basis and the equal life group (ELG) procedure.

I hope this helps!

Andrew

Andrew Byard P.Eng.
Senior Lifecycle Engineer
AltaLink
403-267-2139

(3)

## Mugford, Ralph

**From:** Derek.Olson@atcoelectric.com
**Sent:** December 11, 2012 4:28 PM
**To:** Mugford, Ralph
**Cc:** Al.Amarshi@atcoelectric.com
**Subject:** FW: Depreciation Methodology Used By Your Utility

Hi Ralph.

ATCO Electric uses ELG.


**Please consider the environment before printing this e-mail**

**Derek Olson**
Customer Care and Billing Governance
***ATCO Electric***
Bus: (780) 420-7635
Fax: (780) 420-7056
derek.olson@atcoelectric.com

(4)

## Mugford, Ralph

**From:** Saciragic, Alisa [Saciragic@MaritimeElectric.com]
**Sent:** December 13, 2012 9:01 AM
**To:** Mugford, Ralph
**Subject:** RE: Depreciation Methodology Used By Your Utility

Hi Ralph,

I asked our Finance department for the answer, since it is not my field and they provided me with the following:

"We use Group Depreciation – Average Service Life method following the same grouping as the FERC Uniform System of Accounts"

Regards,

**Alisa Saciragic, P.Eng.**
Superintendent, Engineering

**Maritime Electric Company Limited**
PO Box 1328,180 Kent Street
Charlottetown, PE C1A 7N2

Office: (902)629-3638
Cell: (902)393-6185
Fax: (902)629-3630
Saciragic@maritimeelectric.com

(5)

# ALTALINK LP

CALGARY, ALBERTA

# DEPRECIATION STUDY

# CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES APPLICABLE TO PLANT IN SERVICE THROUGH DECEMBER 31, 2014

Gannett Fleming

*Excellence Delivered As Promised*

# PART III. RESULTS OF STUDY

## QUALIFICATION OF RESULTS

The calculated annual and accrued depreciation and the annual provision for true-up (amortization of the accumulated depreciation variance) are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and salvage and for the change of the composition of property in service. The annual accrual rates and the accrued depreciation were calculated in accordance with the straight line method, using the equal life group procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

## DESCRIPTION OF DETAILED TABULATIONS

A summary of the results of the study, as applied to the forecast original cost of the plant as of December 31, 2013 through 2014, is presented in the schedules on pages III-4 through III-11. Schedule 1 beginning at page III-4 presents a summary of the original cost, calculated accrual amount, annual provision for true up and the depreciation rate applicable to each of the property groups as at December 31, 2013 through 2014 for both the amounts related to the recovery of original costs and the amounts required for the recovery of costs of removal. Schedule 2 beginning on page III-8 presents a comparison of the calculated accrued depreciation and the book accumulated depreciation and the calculation of the annual true up provision related to each plant account as of December 31, 2013 through 2014.

calculation of depreciation. Part III. Results of the Study, presents a summary of annual depreciation, the statistical analyses of service lives, and the detailed tabulations of annual depreciation.

## BASIS OF THE STUDY

Depreciation. The annual depreciation accrual and the related calculated requirement for accumulated depreciation were calculated using the straight line method, the whole life basis and the average service life (ASL) procedure. The calculation was based on the attained ages and estimated service life characteristics for each depreciable group of assets.

Service Life Estimates. The method of estimating service life consisted of compiling the service life history of the plant accounts, reducing this history to trends through the use of analytical techniques that have been generally accepted in various regulatory jurisdictions, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of the Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived. The service life estimates used in the depreciation calculation incorporated historical data compiled through March 31, 2011. Such data included plant additions, retirements, transfers and other plant activity. Additionally, the review considered the comments from operational interviews and from NWTPC Management.

(7)

MANITOBA HYDRO
Winnipeg, Manitoba

# DEPRECIATION STUDY

## CALCULATED ANNUAL DEPRECIATION ACCRUALS
## RELATED TO ELECTRIC PLANT
## AT MARCH 31, 2005

GANNETT FLEMING, INC. – VALUATION AND RATE DIVISION

Harrisburg, Pennsylvania  Calgary, Alberta  Valley Forge, Pennsylvania

terminal life of the facilities. The estimates of salvage are expressed as the average net percent of the cost of plant.

CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

Group Depreciation Procedures. When more than a single item of property is under consideration, a group procedure for depreciation is appropriate because normally all of the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, the average service life and equal life group procedures.

In the average service life procedure, the rate of annual depreciation is based on the average service life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to the average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life.

In the equal life group procedure, also known as the unit summation procedure, the property group is subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life unit. Although, in the opinion of Gannett Fleming, the equal life group procedure is superior to the average service life procedure in matching depreciation expense and consumption of service value, the

average service life procedure was used in order to conform to past Company practices and for consistency with the practices of other subsidiary companies.

CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period of the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts during each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will render most of their service, the amortization period and service lives used by other utilities, and the service life estimates previously used for the asset under depreciation accounting.

Amortization accounting is proposed for certain General Plant accounts that represent numerous units of property, but a very small portion of depreciable electric plant in service. The accounts and their amortization periods are as follows:

| Account | | Amortization Period, Years |
|---|---|---|
| 2350 | Easements | 75 |
| 6380 | Shop/Garage Tools and Equipment | 15 |
| 6480 | Computer Applications | 10 |
| 6580 | Computer Equipment | 5 |
| 6680 | Office Furniture and Equipment | 15 |
| 7777 | Hot Water Tanks | 15 |
| 8888 | Bill Inserter | 7 |
| 9999 | Fire Retardant Clothing | 5 |

(8)

## Casey, Jack

**From:** Jerry.Janow@atcoelectric.com
**Sent:** Tuesday, December 11, 2012 3:40 PM
**To:** Casey, Jack
**Subject:** RE: Depreciation Question

Hi Jack

Yes I can confirm that AE and AG both use ELG.

***Jerry Janow***
**Manager Regulatory-Special Projects**
**ATCO Electric, 17th Floor**
**10035 - 105 St, T5J 2V6**
**Bus: 780-420-5432 Fax: 780-420-7120 Cell: 780-977-4899**
**Email: jerry.janow@atcoelectric.com**

9

## Casey, Jack

**From:** Gursky, Norma [Norma.Gursky@fortisalberta.com]
**Sent:** Tuesday, December 11, 2012 1:14 PM
**To:** Casey, Jack
**Subject:** RE: Depreciation Procedure

Yes we are still using ELG.

Norma

10

Gannett Fleming
Your Trusted Advisor Since 1915

GANNETT FLEMING, INC.
Suite 277
200 Rivercrest Drive S.E.
Calgary, Alberta T2C 2X5

**Office: (403) 257-5946**
Fax: (403) 257-5947
www.gannettfleming.com

September 10, 2010

AltaGas Utilities, Inc.
5509 – 45th Street SW
Leduc, Alberta, Canada
T9E 3N3

Attention Mr. Arnold Mantei,
Vice President

Pursuant to your request, we have conducted a depreciation study related to the average original cost of investment of the natural gas transmission and distribution systems of AltaGas Utilities Inc. from December 31, 2010 to December 31, 2012. Our report presents a description of the methods used in the estimation of depreciation and net salvage, the statistical analyses of service life, and the summary and detailed tabulations of annual and accrued depreciation.

The depreciation study includes the development of depreciation rates in a manner which will comply with the impending convergence of Canadian Generally Accepted Accounting Principles (GAAP) to the International Financial Reporting Standards (IFRS).

The calculated annual depreciation accrual rates presented in the report are based on the straight-line whole life method using the equal life group procedure, with any accumulated depreciation variances in excess of 5% amortized over the estimated remaining life of the assets. An annual review of the depreciation rates using the same estimates and methods is recommended.

Respectfully submitted,

GANNETT FLEMING, INC.

LARRY E. KENNEDY
Director, Canadian Operations

LEK:hac
Project: 052145

(11)

# NEW BRUNSWICK POWER DISTRIBUTION AND CUSTOMER SERVICE CORPORATION

FREDERICTON, NEW BRUNSWICK

# DEPRECIATION STUDY

## CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES APPLICABLE TO PLANT IN SERVICE AS OF MARCH 31, 2006

Gannett Fleming
Valuation and Rate Division

Harrisburg, Pennsylvania  Calgary, Alberta  Valley Forge, Pennsylvania

BASIS OF THE STUDY

Depreciation. The depreciation accrual rates and accrued depreciation were calculated using the straight line method, the remaining life basis and the equal life group (ELG) procedure. The calculation was based on the attained ages and estimated service life and net salvage characteristics for each depreciable group of assets.

Service Life and Net Salvage Estimates. The method of estimating service life consisted of compiling the service life history of the plant accounts and subaccounts, reducing this history to trends through the use of analytical techniques that have been generally accepted in various regulatory jurisdictions, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived. The service life estimates used in the depreciation calculation incorporated historical data compiled through March 31, 2006. Such data included plant additions, retirements, transfers and other plant activity.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was obtained through contact with Company representatives. The information gained though these discussions with company representatives was also used in the developments of the average service life estimates.

(12)

# DEPRECIATION STUDY

# DETERMINATION OF AVERAGE SERVICE LIVES FOR RATE MAKING PURPOSES FOR

# BC HYDRO'S ELECTRIC TRANSMISSION ASSETS

Gannett Fleming
Valuation and Rate Division

Harrisburg, Pennsylvania  Calgary, Alberta  Valley Forge, Pennsylvania

depreciation, and Part IV, Supporting Material, presents the statistical analyses of service lives.

BASIS OF THE STUDY

Depreciation. The average service life estimates presented herein are applicable to be used in depreciation calculations based on the straight-line method, the whole life basis and the average group Life (AGL) procedure. The determinations were based on the attained ages and estimated service life characteristics for each depreciable group of assets (profile ID's).

Service Life Estimates. The method of estimating service life consisted of compiling the service life history of the plant accounts and subaccounts, reducing this history to trends through the use of analytical techniques that have been generally accepted in various regulatory jurisdictions, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived. The service life estimates used in the depreciation calculation incorporated historical data compiled through March 31, 2003. Such data included plant additions, retirements, transfers and other plant activity.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was obtained through contact with Company personnel which included site tours and interviews with operational and management staff of the company.

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# BC HYDRO

VANCOUVER, BRITISH COLUMBIA

DEPRECIATION STUDY

DETERMINATION OF AVERAGE SERVICE LIVES
FOR RATE MAKING PURPOSES

ELECTRIC GENERATION, DISTRIBUTION AND GENERAL PLANT ASSETS

**DECEMBER 2005**

Gannett Fleming
Valuation and Rate Division

Harrisburg, Pennsylvania  Calgary, Alberta  Valley Forge, Pennsylvania

depreciation, and Part IV, Supporting Material, presents the statistical analyses of service lives.

## BASIS OF THE STUDY

Depreciation. The average service life estimates presented herein are applicable to be used in depreciation calculations based on the straight-line method, the whole life basis and the average group Life (AGL) procedure. The determinations were based on the attained ages and estimated service life characteristics for each depreciable group of assets (profile ID's).

Service Life Estimates. The method of estimating service life generally consisted of compiling the service life history of the plant accounts and subaccounts, reducing this history to trends through the use of analytical techniques that have been generally accepted in various regulatory jurisdictions, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived. The service life estimates used in the depreciation calculation incorporated historical data compiled through March 31, 2003. Such data included plant additions, retirements, transfers and other plant activity. In addition, in a number of accounts the average service life estimates were established based on the experience and professional judgment of Gannett Fleming and through comparisons to other peer electric utilities.

(14)

# THE CITY OF RED DEER ELECTRIC SYSTEM

RED DEER, ALBERTA

# DEPRECIATION STUDY

## CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AND ACCRUED DEPRECIATION RELATED TO ELECTRIC PLANT UPSTREAM OF THE 25Kv INTERFACE FORECAST AS OF DECEMBER 31, 2011


Gannett Fleming
Valuation and Rate Division

*Excellence Delivered As Promised*

*Harrisburg, Pennsylvania* *Calgary, Alberta* *Valley Forge, Pennsylvania*

THE CITY OF RED DEER ELECTRIC SYSTEM

DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES
AND ACCRUED DEPRECIATION
RELATED TO ELECTRIC PLANT UPSTREAM OF THE 25Kv INTERFACE
FORECAST AS OF DECEMBER 31, 2011

# PART I. INTRODUCTION

## SCOPE

This report sets forth the results of the depreciation study for The City of Red Deer Electric System (the Electric System) upstream of the 25Kv interface. The purpose of the study was to determine the annual depreciation accrual rates and amounts for ratemaking purposes applicable to the forecast original cost of the Electric System as of December 31, 2011. The depreciation accrual rates presented herein are based on generally-accepted methods and procedures for calculating depreciation.

Part I, Introduction, of this report, contains statements with respect to the scope and plan of the report and the basis of the study. Part II, Methods Used in the Estimation of Depreciation, presents the methods used in the estimation of average service lives, survivor curves, and in the calculation of depreciation. Part III, Results of Study, presents a summary of annual and accrued depreciation; Part IV, Smoothed Survivor Curves; and Part V, the detailed tabulations of annual and accrued depreciation, respectively.

## BASIS OF THE STUDY

Depreciation. The annual and accrued depreciation were calculated by the straight line method using the equal life group procedure and applied on a remaining life basis. The calculations of composite remaining life and annual depreciation accrual

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# THE CITY OF LETHBRIDGE
# ELECTRICAL UTILITY
LETHBRIDGE, ALBERTA

## DEPRECIATION STUDY

## CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES AND ACCRUED DEPRECIATION RELATED TO ELECTRIC TRANSMISSION PLANT AS AT DECEMBER 31, 2007

Gannett Fleming
Valuation and Rate Division

Harrisburg, Pennsylvania  Calgary, Alberta  Valley Forge, Pennsylvania

## BASIS OF THE STUDY

The annual and accrued depreciation were calculated by the straight line method using the equal life group procedure. The calculations were based on the plant balances as of December 31, 2007.

The service life and salvage study included a review of accounting records, discussions with Company management and representatives, and comparison of the company facilities to the average service lives of a group of peer electric utilities. The data necessary to conduct mortality studies of service life were not available. However, the vintage year of investment was available in order that the distribution of the aged surviving balances could be calculated for each account.

An approach used by an increasing number of utilities, in which general plant equipment is amortized over the period during which it renders most of its service value, was used in this study to develop depreciation rates for the City owned general plant assets. The use of amortization, rather than depreciation avoids the need to prepare costly inventories of equipment in order to determine retirements inasmuch as the equipment is retired from the books when fully amortized.

## SUMMARY

Summaries of the study results by plant account are presented in the schedules in Part III of the report. As noted in Part III, the use of the annual accrual rates and the maintenance and monitoring of the accumulated depreciation reserve at the plant account level is recommended. Further, annual recalculation of the annual accrual rates based on the estimates of service life and net salvage as presented in this report and the updated composition of assets is recommended.

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# TRANSCANADA PIPELINES LIMITED
# CANADIAN MAINLINE
Calgary, Alberta

# DEPRECIATION STUDY

# CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES APPLICABLE TO FORECAST PLANT IN SERVICE AS OF DECEMBER 31, 2011

Gannett Fleming
Valuation and Rate Division

Harrisburg, Pennsylvania  Calgary, Alberta  Valley Forge, Pennsylvania

within each segment did not match the consumed service value of the assets within each segment. In particular, Gannett Fleming noted that the Northern Ontario segment appeared to be under-recovered in comparison to the Prairies and Eastern Triangle segments. In consideration of this finding, Gannett Fleming determined that a different allocation of the booked accumulated depreciation is reasonable and should be undertaken by the Company to better align the amount of accumulated depreciation assigned to each segment to the consumption of the service value of the assets within each segment. TransCanada has developed a different allocation of accumulated depreciation which has been included in the depreciation calculations of this depreciation study. As a comparison, Gannett Fleming has also provided in this study, the results of a "Status Quo" case that does not include the re-allocation of accumulated depreciation to the Northern Ontario segment, and which also includes a shortened economic planning horizon for the Northern Ontario segment.

The depreciation rates developed in this depreciation study continue to reflect a weighting of the assets within each segment that will be subjected to interim versus terminal forces of retirement. The net salvage percentages used in the depreciation rate calculations have followed the NEB approved concept of recovery of net salvage related to the interim retirement activity only.

BASIS OF THE STUDY

Depreciation. The annual and accrued depreciation were calculated by the straight line method using the Average Life Group (ALG) procedure, applied on a remaining life basis. The calculations were based on the forecast ledger values as of

(17)

# SASKENERGY INCORPORATED

REGINA SASKATCHEWAN

DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS

RELATED TO GAS PLANT

AT DECEMBER 31, 2006

Gannett Fleming

Valuation and Rate Division

Harrisburg, Pennsylvania Calgary, Alberta Valley Forge, Pennsylvania

BASIS OF THE STUDY

Depreciation. The annual and accrued depreciation were calculated by the straight line method using the equal life group procedure and applied on a remaining life basis. The calculations of composite remaining life and annual depreciation accrual amounts were based on attained ages and estimated service life and net salvage characteristics for each depreciable group of assets.

Service Life and Net Salvage Estimates. The method of estimating service lives consisted of compiling the service life history of the plant accounts and subaccounts, reducing this history to trends through the use of acceptable analytic techniques, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived.

The service life estimates used in the depreciation calculations incorporated historical data compiled from the property records of the Company. Such data included plant additions, retirements, transfers and other activity through 2006. A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement were obtained through discussions with operating and management personnel, and through a tour of company facilities. The use of survivor curves to reflect the expected dispersion of retirement provides a consistent method of estimating depreciation for gas plant. Iowa type survivor curves were used to depict the estimated survivor curves.

Decision **2009-035**

AUC
Alberta Utilities Commission

# ENMAX Power Corporation

## 2007-2016 Formula Based Ratemaking

## March 25, 2009

## 16.2 Depreciation

356. EPC forecast its 2007 depreciation expense to be $35.8 million for distribution and $6.5 million for transmission.[290] EPC based its depreciation expense forecast on a study prepared by Larry Kennedy of Gannet Fleming Inc.

357. This study was developed using the following:

- A mortality study to determine the average service life estimates (excepting those for which simplified methods are used);
- Net salvage percentages developed as a result of a net salvage study;
- Continued use of simplified depreciation methods for certain accounts, as directed by the EUB in Decision 2006-002;
- Application of Equal Life Group[291] (ELG) calculations; and
- Discontinuance of the traditional method of truing-up the accumulated depreciation variances between book and calculated amounts, in favour of a 10-year amortization of the variances.[292]

358. The study determined the 2007 composite depreciation rates for distribution and transmission to be 3.73 percent and 2.7 percent, respectively. EPC proposed to use the 2007 depreciation rates for each subsequent year in the FBR term.[293]

359. UCA submitted depreciation evidence and was the only intervener to address the subject of depreciation in either Argument or Reply Argument. Although UCA did not agree with all of Mr. Kennedy's evidence, UCA, in its Argument, indicated that the differences did not have a significant impact on depreciation expense. As such, UCA did not take issue with the results of the study prepared by Mr. Kennedy. However, UCA ,in its Argument, submitted that the AUC should direct EPC:

- to file a new depreciation study with the rebasing of the customer rates at the end of the five-year period;
- to revert to the current remaining life methodology at the end of the FBR term; and
- to retire assets being depreciated using the Simplified Depreciation method at the end of the amortization period for each vintage of the respective assets.

360. These issues are discussed separately in the following sections.

### 16.2.1 Mid-term Depreciation Study

361. EPC proposed to rebase depreciation rates and true-up the accumulated depreciation through either a technical update or a full depreciation study as part of the proposed rebasing of customer rates after five years.[294] In Argument, UCA submitted that the Commission should direct EPC to include a new depreciation study as part of the rebasing of EPC's customer rates

[290] Exhibit 0015.EPC-12, EPC's Application, dated December 10, 2007, page 71
[291] Application, Appendix 13, Part II, "Methods Used in the Estimation of Depreciation"
[292] EPC Application, page 71
[293] EPC Application, page 71 of 104
[294] Information Response UCA.EPC-045 b)

> **determines for each vintage the vintage theoretical accumulated depreciation factor as of December 31, 2003 by multiplying each vintage accrual rate by the age of that vintage as of December 31, 2003. The Board notes that these vintage accrual factors are applied to actual December 31, 2003 account plant balances to arrive at the composite year-end theoretical accumulated factor for each account. The Board considers that this method ignores the retirements that were predicted to occur for each ELG within the study year.** For example the accumulated accrued factor for the 2003 vintage as of December 31, 2003 should be the 2003 vintage rate times the age less the first equal life group which is predicted to be retired as of December 31, 2003. This would result in an accumulated accrual factor of 0 for the first equal life group of 13.2% assumed to retire on December 31, 2003. The Board is satisfied that the GF ELG Method does not appear to introduce any material errors respecting this finding. However, the Board directs EPC to correct these minor distortions in the next Depreciation Study. **[Emphasis added]**

401. In BR.EPC-025 d), EPC was directed to use the "theoretically correct ELG depreciation rate" to calculate the composite 2007 distribution and transmission rates resulting from the use of the Gannet Fleming Equal Life Group Method and the Board Equal Life Group Method.[329] EPC filed a worksheet for each of the 10 distribution plant accounts, 16 transmission plant accounts, and 3 general plant accounts for which an Iowa curve was used to calculate depreciation expense.[330] The total depreciation expense calculated using the GF ELG method was $18,786,692 while the depreciation expense calculated using the Board ELG method was $18,444,406.

### Commission Findings

402. The Commission approves EPC's proposal to use the Gannet Fleming Equal Life Group method. The Commission finds that the resulting difference in depreciation rates is insignificant.

### Decision 2006-002, Direction 35 – Implement the One-Half Year Convention

> The Board was not provided any of the back-up data for the calculation of the depreciation expense for General Accounts and is therefore unable to determine if the half year convention has been violated. The Board will, for the purposes of this Decision, accept EPC's calculation of the General Accounts for 2005 and 2006. However, the Board directs EPC to implement the one-half year convention for the most recent vintage at the time of the next GTA.

403. In response to this Board Direction EPC stated that Gannet Fleming reports that the calculations made in accordance with the traditional Gannet Fleming method result in the application of the mid-year convention. However, the modifications as developed by the Board in Decision 2006-002 were also applied to comply with this directive. EPC submitted that the use of the depreciation rate calculated in accordance with the Board's directive results in the application of only a one-quarter year convention.

### Commission Findings

404. The Commission has reviewed EPC's response and accepts that the method used by EPC results in the application of the mid-year convention.

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[329] The average of the past 5 years was used as a proxy for the 2007 forecast additions in absence of this data on the record

[330] Exhibit 140, BR.EPC-024 d) Attachment, dated September 14, 2007

(19)

# NORTHLAND UTILITIES (YELLOWKNIFE) LIMITED

Yellowknife, Northwest Territories

## DEPRECIATION STUDY

## CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES APPLICABLE TO PLANT IN SERVICE AT DECEMBER 31, 2010

Gannett Fleming

Valuation and Rate Division

Harrisburg, Pennsylvania  Calgary, Alberta  Valley Forge, Pennsylvania

BASIS OF THE STUDY

Depreciation. The depreciation accrual rates and accrued depreciation were calculated using the straight line method, the equal life group (ELG) procedure, applied on a whole life basis. The calculation was based on the attained ages and estimated service life and net salvage characteristics for each depreciable group of assets.

Service Life and Net Salvage Estimates. The method of estimating service life consisted of compiling the service life history of the plant accounts and subaccounts, reducing this history to trends through the use of analytical techniques that have been generally accepted in various regulatory jurisdictions, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived. The service life estimates used in the depreciation calculation incorporated historical data compiled through December 31, 2010. Such data included plant additions, retirements, transfers and other plant activity.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was confirmed through contact with Company personnel.

The net salvage estimates were based on judgment that incorporated analyses of historical data, a review of policies and outlook with Company management, a general knowledge of the electric utility industry, and comparisons of the net salvage estimates from studies of other electric utilities. The analyses of historic retirement activity, costs of

IN THE MATTER OF the *Public Utilities Act*
Revised Statutes of Yukon, 2002, c. 186, as amended

and

An Application by Yukon Electrical Company Limited
For Approval of Revenue Requirements for 2008 and 2009

# REASONS FOR DECISION

## APPENDIX A TO BOARD ORDER 2009-2

### Views of the Board

The Board agrees with the position of YEC that the 3.8% increase for 2008 is the most accurate and up-to-date information in this proceeding. Therefore, the Board directs YECL to use 3.8% as the increase in Taxes Other Than Income for 2008 over 2007 actual costs. The Board accepts the 4% forecast increase amount over 2008 costs for 2009 costs as proposed by YECL.

## 5.6 Depreciation

### 5.6.1 Equal Life Group (ELG) versus Average Service Life (ASL) methodologies

Depreciation for 2008 and 2009 for YECL was based on a depreciation study by Gannett Fleming Inc. (the Study). The Study based the depreciation rates on the straight-line whole-life method using the equal-group life procedure.[36] Attachment 1 of Section 7 of the Application contains the Study. Part I explains the scope, Part II describes the Study, and Part III provides the results. Depreciation expense, through the Study was determined to be $4,365,000 for 2008 and $4,837,000 for 2009. The Study is a continuation of the methods and assumptions utilized by YECL in the past. The position of YECL is that the ELG method has regulatory acceptance in several jurisdictions and provides better matching of asset consumption to depreciation expense.

In its argument, YEC stated that for regulatory consistency and to reduce test-year costs for ratepayers, YECL should have considered adopting the ASL approach as well as followed the Future Reserve for Site Restoration directions from Order 2005-12.

YEC contended that the ASL method was widely accepted in Canadian regulatory jurisdictions, was a means to balance utility and ratepayer interests, and was accepted by the Board in Order 2005-12.[37]

YEC further submitted that rate stability is a consideration when determining a depreciation method and that such was a governing factor when choosing the method for YEC in its previous application.

LE was of the view that there was not enough evidence to suggest YECL should change the method of depreciation utilized.

In its argument, YECL stated that the depreciation method employed by YECL was the same method as previously utilized by YECL. YECL confirmed that it supports the expert evidence that Gannett Fleming provided. The YECL position is that the ELG method is technically superior, widely accepted, complies with International Financial Reporting Standards, and should not be changed based on a criteria to reduce the test year revenue requirement.

[36] Application, Section 7 – Attachment 1, page 2 of 158
[37] From YEC Argument, pages 16-17 inclusive

stated that YECL's arguments do not recognize that it was the Board that raised the FRSR issue in 2005 and decided that that was the approach to be taken in Yukon.

In its reply argument, YECL said that YEC is asking the Board to decide this topic based on a previous YEC proceeding and argued that if a decision was made on this basis, it could result in an error of law. YECL maintained that its treatment of negative net salvage was consistent with past practice, based on the expert testimony of its witness, and is widely applied across North America.

**Views of the Board**

The Board acknowledges that both the ELG and ASL methods are recognized in Canadian regulatory jurisdictions. Until 2005, both YECL and YEC utilized the ELG method when determining the amounts to be included in depreciation. The Board, with the exception noted below, finds that it is in agreement with the findings of the depreciation study undertaken by Gannett Fleming Inc. It is the Board's view that consistency is important and that it is not limited to methods employed across utilities but requires a consistent use of methodology within a utility. In this particular case, both YECL and YEC calculate depreciation and use depreciation expense to determine overall revenue requirement. YECL has demonstrated that it has consistently employed the same methodology. Therefore, the Board accepts the use of the ELG method by YECL.

With respect to FRSR, the Board is persuaded by the arguments of YEC and CW that consistency in this area is important. YECL responded that two critical facts were specific to YEC and those facts were not consistent with the circumstances of YECL: (1) YEC has recorded an Asset Retirement Obligation related to the legal requirement for the removal of facilities in compliance with Section 3110 of the CICA handbook; and (2) The company has recorded FRSR requirements into a separate balance sheet account[49]. The Board is of the view that the substance of the circumstance of YECL is similar to that of YEC. That is, YECL has a salvage obligation and YECL has the ability and can account for amounts equivalent to FRSR. Whereas both YECL and YEC utilized acceptable depreciation methods, the treatment of FRSR or negative net salvage is not consistent between the two utilities. Given that the negative net salvage balance continues to grow, the Board does not believe that there is a need to continue to collect such amounts. YECL is to remove these amounts[50] from its depreciation expense for each of the test years and is not to include any amounts for negative net salvage until Board approval is provided. Further, the Board orders that the December 31, 2007, accumulated amount for net negative salvage be shown as a liability and be reduced as salvage costs are incurred for the years commencing with 2008. Similar to YEC, YECL is to inform the Board and interested parties when the balance for this liability account reaches $2 million.

[49] YEC-YECL-17(g), page 4 of 6
[50] YECL is to remove from depreciation expense $945,000 for 2008 and $1,003,000 for 2009

# QULLIQ ENERGY CORPORATION

# on behalf of

# Nunavut Power Corporation

# 2010/11General Rate Application

# September 2010

- Northland Utilities (NWT) Ltd
- ATCO Electric
- Manitoba Hydro

The average service lives from each of the above utilities were considered in light of the specific Qulliq capitalization and operating policies. Additionally, the comments from Qulliq operating and management staff were also considered. Table 3 in the Results section of this report provides a summary of the average service life recommendations for each of the peer utilities and also provides the recommendation of Gannett Fleming for this current depreciation study.

## CALCULATION OF ANNUAL AND ACCRUED DEPRECIATION

Group Depreciation Procedures. When more than a single item of property is under consideration, a group procedure for depreciation is appropriate because normally all of the items within a group do not have identical service lives, but have lives that are dispersed over a range of time. There are two primary group procedures, namely, average service life and equal life group.

In the average service life procedure, the rate of annual depreciation is based on the average life or average service life of the group, and this rate is applied to the surviving balances of the group's cost. A characteristic of this procedure is that the cost of plant retired prior to average life is not fully recouped at the time of retirement, whereas the cost of plant retired subsequent to average life is more than fully recouped. Over the entire life cycle, the portion of cost not recouped prior to average life is balanced by the cost recouped subsequent to average life. In this procedure, the accrued depreciation is based on the average service life of the group and the average

remaining life of each vintage within the group derived from the area under the survivor curve between the attained age of the vintage and the maximum age.

In the equal life group procedure, the property group is subdivided according to service life. That is, each equal life group includes that portion of the property which experiences the life of that specific group. The relative size of each equal life group is determined from the property's life dispersion curve. The calculated depreciation for the property group is the summation of the calculated depreciation based on the service life of each equal life group.

It is the view of Gannett Fleming that the ELG procedure provides a superior match of the consumption of service values of the assets in service to the depreciation expense. However, the ASL procedure is widely used throughout Northern Canadian electric utilities and throughout North America. Gannett Fleming has incorporated the use of the ASL procedure in the calculation of the depreciation accrual rates in this depreciation study.

## CALCULATION OF ANNUAL AND ACCRUED AMORTIZATION

Amortization is the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized. Normally, the distribution of the amount is in equal amounts to each year of the amortization period.

The calculation of annual and accrued amortization requires the selection of an amortization period. The amortization periods used in this report were based on judgment which incorporated a consideration of the period during which the assets will

## Casey, Jack

**From:** Cahill, Jason [Jason.Cahill@fortisbc.com]
**Sent:** Tuesday, December 11, 2012 5:42 PM
**To:** Casey, Jack
**Cc:** Martin, Joyce (FortisBC Electric)
**Subject:** RE: Depreciation

Hi Jack – Yes, both FBC Electric and Gas had depreciation studies prepared for the 2012-2013 RRA which use the Average Service Life method.

# NORTHLAND UTILITIES (NWT) LIMITED

HAY RIVER, NORTHWEST TERRITORIES

## DEPRECIATION STUDY

## CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES APPLICABLE TO PLANT IN SERVICE AT DECEMBER 31, 2010

Gannett Fleming

Valuation and Rate Division

Harrisburg, Pennsylvania Calgary, Alberta Valley Forge, Pennsylvania

NORTHLAND UTILITIES (NWT) LIMITED

DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUAL RATES
APPLICABLE TO PLANT IN SERVICE
AT DECEMBER 31, 2010

# PART I. INTRODUCTION

## SCOPE

This report sets forth the results of the depreciation study conducted for the electric production, transmission and distribution assets of Northland Utilities (NWT) Limited (the "NWT System") to determine the annual depreciation accrual rates and amounts for ratemaking purposes applicable to the original cost of plant at December 31, 2010.

The depreciation accrual rates presented herein are based on generally-accepted methods and procedures for calculating depreciation. The estimated survivor curves used in this report are based on studies incorporating data through 2010.

Part I, Introduction, contains statements with respect to the scope of the report and the basis of the study. Part II, Methods Used in the Estimation of Depreciation, presents the methods used in the estimation of average service lives, survivor curves and net salvage and in the calculation of depreciation. Part III, Results of Study, presents a summary of annual depreciation, the statistical analyses of service lives and net salvage estimates, and the detailed tabulations of annual depreciation.

## BASIS OF THE STUDY

Depreciation. The depreciation accrual rates and accrued depreciation were calculated using the straight line method, the Equal Life Group (ELG), applied using the

whole life basis. The calculation was based on the attained ages and estimated service life and net salvage characteristics for each depreciable group of assets.

Service Life and Net Salvage Estimates. The method of estimating service life consisted of compiling the service life history of the plant accounts and subaccounts, reducing this history to trends through the use of analytical techniques that have been generally accepted in various regulatory jurisdictions, and forecasting the trend of survivors for each depreciable group on the basis of interpretations of past trends and consideration of Company plans for the future. The combination of the historical trend and the estimated future trend yielded a complete pattern of life characteristics from which the average service life was derived. The service life estimates used in the depreciation calculation incorporated historical data compiled through December 31, 2010. Such data included plant additions, retirements, transfers and other plant activity.

A general understanding of the function of the plant and information with respect to the reasons for past retirements and the expected future causes of retirement was confirmed through contact with Company personnel.

The net salvage estimates were based on judgment that incorporated analyses of historical data, a review of policies and outlook with Company management, a general knowledge of the electric utility industry, and comparisons of the net salvage estimates from studies of other electric utilities. The analyses of historic retirement activity, costs of retirement, and gross salvage proceeds, consisted of expressing the cost of removal and gross salvage as percents of the original cost retired.

## Casey, Jack

**From:** colin.fraser@HydroOne.com
**Sent:** Wednesday, December 12, 2012 11:29 AM
**To:** Casey, Jack
**Cc:** frank.dandrea@HydroOne.com; Gary.Beck@HydroOne.com; colin.fraser@HydroOne.com
**Subject:** RE: Depreciation Question

Jack – for clarity I asked our depn consultant to associate our procedure with ALG and here's what he said:

"The questions asks about the "average life group procedure." The correct terminology is Broad Group procedure in which each vintage is assumed to have the same average service life. The Vintage Group procedure is a refinement of the Broad Group procedure in that average service lives are estimated for each vintage and composited to obtain a plant account average service life. With exception of a square dispersion, the vintage group procedure is definitely not close to ELG. (Broad Group, Vintage Group and ELG will be identical with a square dispersion). The Vintage Group procedure is closer to the Broad Group procedure. Hope this is helpful."

Colin Fraser
*Manager, Financial Reporting and Accounting Policy*
*Hydro One Networks Inc.*
*Phone - 416-345-5681; Fax - 416-345-6833*
*E-Mail - colin.fraser@HydroOne.com*

the issues relating to decommissioning costs, the straight-line methodology, and escalation rate to be used. NSPI's estimates reflect the best estimate of future decommissioning costs. When NSPI has an obligation to decommission, a liability is required to be set up and expensed as the benefit of the asset is realized. This is in compliance with generally accepted accounting principles. The proposed recovery of these costs uses the same straight-line methodology that is used for recovery of other costs. The methods proposed by Intervenor consultants are inconsistent with the traditional approach, and in the case of Mr. Pous' recommendation, fail to recover the full net salvage cost over the life of the asset.

Gannett Fleming discusses the propriety of using a short term index of consumer inflation, as proposed by the Intervenor consultants, rather than the historical Handy Whitman index, which provides a better proxy for long term escalation costs.

Intervenor consultants have argued for the use of the Average Life Group (ALG) procedure rather than the Equal Life Group (ELG) procedure for calculating annual depreciation accruals. The ELG procedure has been used by the Board and its predecessor for NSPI since 1982. The Nova Scotia Board of Public Utilities explicitly chose to use ELG over ALG when it first considered the question after NSPI became subject to the Board's jurisdiction.[2] This Decision is discussed further in Section 3 below. Mr. Pous' evidence that ALG is used by the 'vast majority' of utilities is not substantiated. Gannett Fleming has provided reply evidence to show that while ALG is commonly used in the United States, in Canada, of 32 utilities surveyed, 17 use ELG, 12 use ALG, and three use a different procedure. Gannett Fleming's Reply Evidence further articulates the merits of the ELG procedure over the ALG procedure. Intevenors have not shown that the Board should reject its long standing application of the ELG procedure in favour of the ALG procedure.

[2] Nova Scotia Board of Public Utilities, Decision in An Application of Nova Scotia Power Corporation for Revisions to Certain Revisions to its Rates and Charges and An Application of Nova Scotia Power Corporation for Approval of Depreciation Rates to be Applied to the Various Classes of Depreciable Property of the Corporation, 1982, E-100bo.

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# DÉCISION

QUÉBEC

RÉGIE DE L'ÉNERGIE

| D-2011-182 | R-3752-2011<br>Phase 2 | 25 novembre 2011 |
|---|---|---|

**PRÉSENTS :**

Gilles Boulianne
Marc Turgeon
Jean-François Viau
Régisseurs

**Société en commandite Gaz Métro**
Demanderesse

et

**Intervenants dont les noms apparaissent ci-après**

**Décision**

***Demande de modifier les tarifs de Société en commandite Gaz Métro à compter du 1er octobre 2011***

également l'avantage de constater une charge d'amortissement plus élevée en début de période, ce qui permet de réduire l'accroissement des soldes de déviations futurs. **En conséquence, la Régie approuve l'utilisation de la méthode ELG.**

## TAUX

[442] Le distributeur propose de modifier les taux d'amortissement de certains postes.

[443] Les principaux postes d'immobilisation sont les conduites principales (50 % des immobilisations) et les branchements d'immeubles (27 % des immobilisations).

**TABLEAU 5**

**Taux d'amortissement des principaux postes des immobilisations**

| | Taux proposés | Taux actuels |
|---|---|---|
| Conduites principales en acier | 2,82 % | 3,06 % |
| Conduites principales en plastique direct | 1,98 % | 2,21 % |
| Branchements d'immeubles en acier | 2,66 % | 3,77 % |
| Branchements d'immeubles en plastique direct | 3,19 % | 3,63 % |

Source : B-0096, page 11

[444] Selon Gaz Métro, l'étude proposée des taux ne cause pas d'impact significatif sur la charge d'amortissement annuelle projetée pour l'année 2012.

[445] Pour les actifs de distribution en acier, soit les conduites et les branchements, l'expert Kennedy recommande une durée de vie moins élevée que celle résultant des analyses statistiques, en raison de sa politique de modération. Selon cet expert, des changements significatifs à la durée de vie de ces actifs ne sont pas conseillés, car ils pourraient mener à des fluctuations considérables lorsque les causes du changement ne sont pas de nature permanente[188].

[446] Quant aux branchements et conduites en plastique direct, l'expert Kennedy recommande des durées de vie plus élevées que dans le passé. Il soutient que la nouvelle

[188] Pièce B-0193, Gaz Métro-6, document 8.12, page 1.

*transport requises pour répondre à la moyenne annuelle de la demande projetée (après interruption);*

***APPROUVER** la modification à la méthode de fonctionnalisation des coûts reliés aux achats de gaz naturel à Dawn selon l'option 2;*

***PRENDRE ACTE** du fait qu'aucune modification à la formule du calcul du prix d'équilibrage pour les clients interruptibles n'est proposée dans le présent dossier;*

***APPROUVER** le maintien du prix minimum d'équilibrage à -1,561 ¢/m³ tel qu'établi dans le dossier R-3720-2010;*

***APPROUVER** l'établissement du prix d'équilibrage pour les clients GAC à la moyenne entre 0,000 ¢/m³ et le prix moyen du tarif $D_4$ mis à jour à chaque dossier tarifaire pour fins d'évaluation des revenus d'équilibrage inclus dans les revenus totaux facturés aux clients en service de GAC;*

***À L'ÉGARD DES TAUX D'AMORTISSEMENT ET DU SUIVI 1 DANS LA DÉCISION D-2011-048***

***APPROUVER** l'utilisation de la méthode ELG plutôt que la méthode ASL;*

***APPROUVER** la modification des taux d'amortissement applicables à certaines catégories d'actifs, tel que plus amplement explicité à l'annexe B de la pièce Gaz Métro-6, Document 8;*

***APPROUVER** la création des nouvelles catégories d'immobilisation décrites à l'annexe C de la pièce Gaz Métro-6, Document 8, ainsi que les taux d'amortissement afférents;*

***APPROUVER** la modification des taux d'amortissement applicables à certaines catégories d'immobilisations déjà existantes, tel que plus amplement explicité à l'annexe C de la pièce Gaz Métro-6, Document 8;*

***DÉCLARER** que le résultat de la validation de la vie utile des actifs touchés par le projet Senneville répond au suivi requis;*

**Exhibit R2 Excel Format**

# ELG vs. ALG
## Results of 2014 *Pro forma* Revenue Requirement Analysis[1]
## ($000s)

| | |
|---|---|
| Decrease in Depreciation[2] | -3,788 |
| Increase in Return on Rate Base[3] | 6,090 |
| Increase in Income Tax[4] | 1,368 |
| **Total increase in Revenue Requirement** | **3,670** |

[1] Estimate based on the difference between the results of the 2010 Depreciation Study and the response to Request for Information CA-NP-003.

[2] Comprised of the following amounts ($000s)

| | |
|---|---|
| Total Depreciation using ALG method | 40,854 |
| Total Depreciation using ELG method | 44,642 |
| **Decrease in Depreciation** | **-3,788** |

For the ALG method, see response to Request for Information CA-NP-003, Attachment A, Schedule 1, Page 6 of 6, Column 6, Total Depreciable Plant. For the ELG method, see Volume 3, Depreciation Study, Page III-9, Column 6, Total Depreciable Plant.

[3] The increase in the return on Rate Base (the increase in Rate Base times the 2014 proposed allowed rate of return on Rate Base).

Return on Rate Base ($000s)

*Increase in Net Book Value:*

| | | | |
|---|---|---|---|
| Decrease in Accumulated Depreciation | | | |
| Calculated Accrued Depreciation, ALG method | -463,071 | | |
| Calculated Accrued Depreciation, ELG method | -563,047 | | |
| Difference | 99,976 | | |
| Increase in Net Book Value | | 99,976 | A |
| *Increase in Future Tax Balance* | | | |
| Increase in CCA claimed (1978 – 2010) | | 0 | B |
| Less Increase in Total Depreciation Expense (1978 – 2010) | | 99,976 | C |
| Timing difference | | -99,976 | D=B-C |
| Future Tax Rate | | 29% | E |
| Increase in Future Tax Balance | | -28,993 | F=DxE |
| Increase in Rate Base | | 70,983 | G=A+F |
| Return on Rate Base (Exhibit 10, page 2 of 2, line 23) | | 8.58% | H |
| **Increase in Return on Rate Base** | | **6,090** | I=GxH |

Calculated Accrued Deprecation for ALG is provided in Attachment A, Schedule 1, response to Request for Information CA-NP-003, Page 6 of 6, Column 8 for Total Depreciable Plant; and for ELG is provided in *Volume 3, Depreciation Study* , Page III-9, Column 8 for Total Depreciable Plant.

[4] This is the increase in income tax required to provide the proposed return on equity for 2014.

| | | |
|---|---|---|
| Portion of Return related to Equity | | |
| Weighted Return on Preferred Shares (Exhibit 10, page 2 of 2, line 21) | 0.06% | |
| Weighted Return on Common Shares (Exhibit 10, page 2 of 2, line 22) | 4.66% | |
| Total Related to Equity | 4.72% | A |
| 2014 Proposed Rate of Return on Rate Base | 8.58% | B |
| Return on Equity and Proportion of Total Return | 55.0% | C=A/B |
| Increase in total return (000s) | 6,090 | D=See footnote 3 |
| Increase in return related to total equity (000s) | 3,350 | E=CxD |
| **Increase in Income Tax (@29%) (000s)** | **1,368** | F=(E/.71)x.29 |